

**Assessment of Conservation Zones at Lot 2 Plan 604231 54
Buckombil Mountain Road, Meerschaum Vale, Ballina
Shire.**

June 2025



Cover photograph: Open forest, Meerschaum Vale, Ballina Shire 2025 (Photo Credit – J. Wickers)

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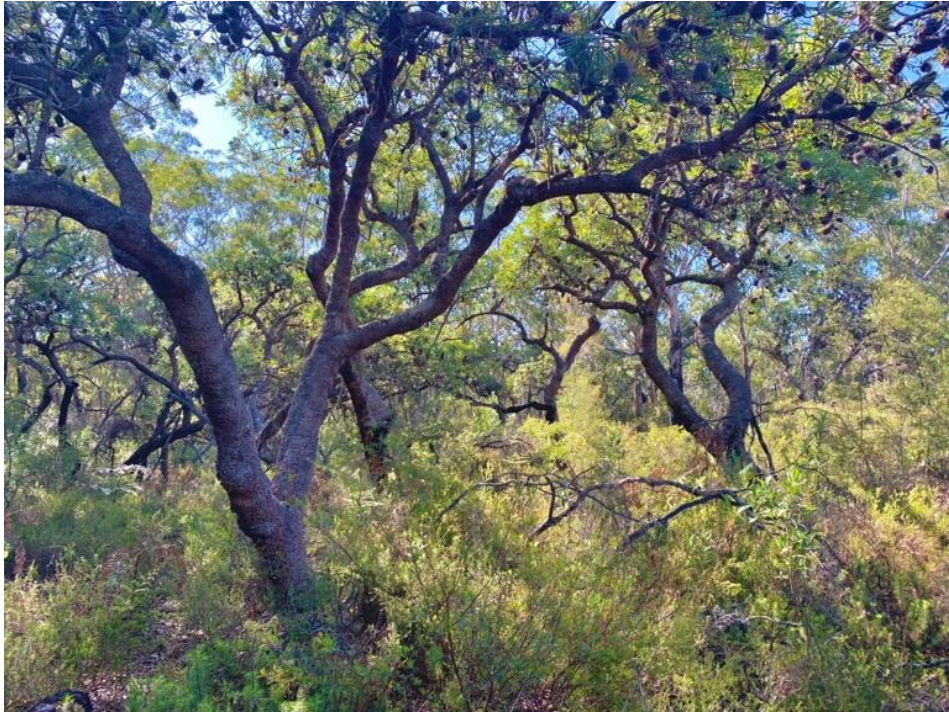
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First Nations People

The People of the Bundjalung Nation developed and maintained a deep and rich connection with the land of the Ballina area. The land nourished all of the person, supplying physical, spiritual, cultural and identity necessities. We wish to acknowledge the First Nations People and pay our respects to their Elders past, present and future.



Ngunya Jargoan Indigenous Protected Area, Wardell/Bagotville (Photo credit G. Beyer).

Acknowledgements

Ballina Shire Council initiated this study and Klaus Kerzinger (Ballina Shire Council) provided support throughout the project.

We would like to thank the Meerschaum Vale landholder who provided access to their property and supported the site visit.

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1. Study Background

Zoning land for environmental protection in the Ballina Shire has a long history.

- 2011-2012. Ballina Shire Council (BSC) proposes new environmental zones in the draft Ballina Local Environmental Plan 2011.
- 2012. The NSW Government announces a review of these lands and defers them from being included in the new LEP. Ballina LEP 2012 is made without any environmental zones.
- 2015. Northern Councils EZone Review conducted by the NSW State Government (NSW Department of Planning and Environment, 2015).
- 2021. BSC reviews all deferred matter land (excluding existing environmental protection zones under Ballina LEP 1987) and develops draft maps (Ascent Ecology, 2021).
- October 2021. Planning Proposal reported to Council's Ordinary meeting. Council resolves to submit the planning proposal to the NSW Government for review and Gateway determination.
- Feb - March 2023. Planning Proposal – *Ballina Local Environmental Plan 2012. Conservation Zone Review (Integration of certain deferred matter land) BSCPP 21/004 February 2023 (V3 Exhibition) 23/2426* placed on public exhibition.
- July 2024 the Department of Planning, Housing and Infrastructure advised that Amendment No 55 of Ballina LEP 2012 had been made. This amendment applied to 457 lots and applied zones generally consistent with the exhibited Conservation Zone Review planning proposal.
- Excluded from Amendment No 55 were 257 lots, including the lots the subject of this report, which were the subject of landowner objections. These lots still require transition from Ballina LEP 1987 to Ballina LEP 2012.

2. Objectives

The key objectives of this study at 54 Buckombil Mountain Road, Meerschaum Vale (**Figure 1**) are:

- Consult with affected landholder.
- Undertake site visit to assess the ecological values present.
- Assess if the vegetation in the areas of interest meets the criteria for Conservation Zone (CZone).
- Determine the primary use of the land at the site to inform the zoning of the land under the provisions of Ballina LEP 2012.

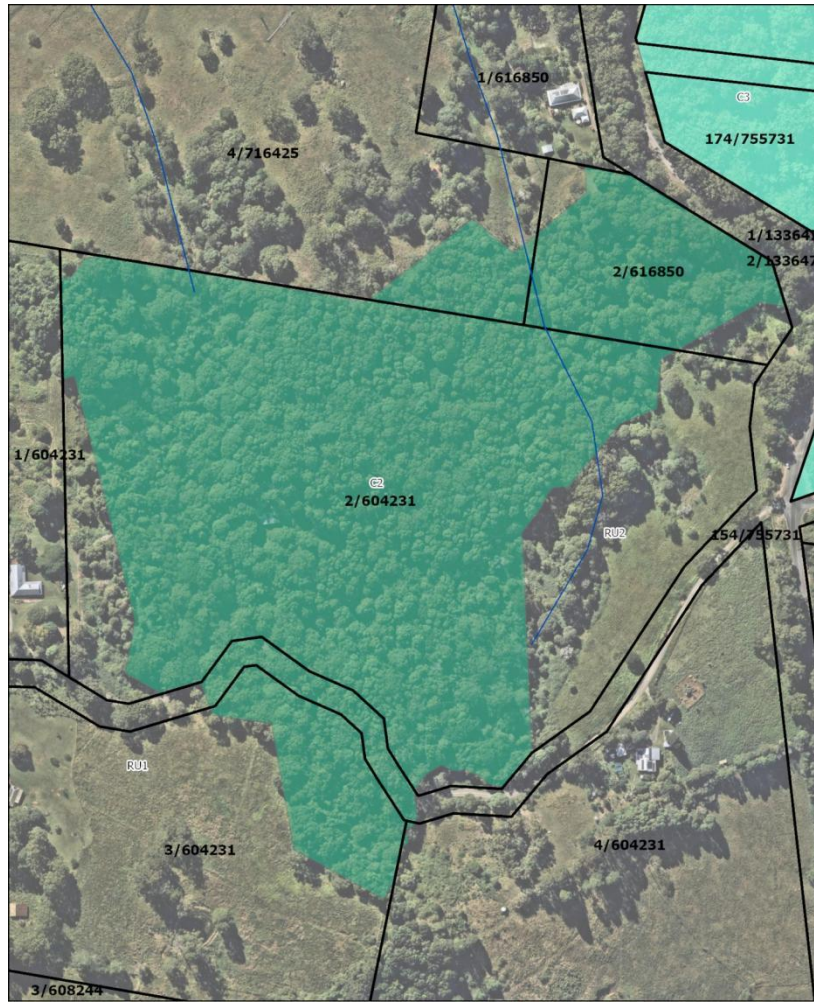


Figure 1 Property to be assessed in study at Meerschaum Vale (Ballina LGA) (Green shading = C2 zoning)

3. Determination of Conservation Zones

The application of CZones in Ballina Shire is required to be based on the NSW Department of Planning and Environment's 2015 *Northern Councils E Zone Review Final Recommendations Report* (NCEZR). Refer to Appendix 1 for details on the criteria for applying C2 - Environmental Conservation or C3 - Environmental Management zoning.

To-date the assessment of CZones has been based on available spatial data, including vegetation mapping and aerial photography.

This study will assess if the vegetation at the site meets the CZone criteria by undertaking a biodiversity field inspections.

4. Primary use of land

The 2015 NCEZR notes that where a C2 or C3 conservation zone is proposed, the primary use of the land is to be considered. The primary use may vary across a particular property depending on the characteristics of the land.

The primary use of the land is defined as the main use for which the land has been used for the last two years.

The primary land use (PLU) category Environmental applies to areas of native vegetation where natural ecological processes predominate. This category may include some agricultural uses such as grazing where these activities are of a secondary or ancillary nature. The PLU Agriculture applies to areas where agricultural activities including cropping, horticulture, pasture management, grazing or other forms of agriculture predominate.

For land that Council has verified as consistent with the vegetation criteria for a conservation zone, an Environmental Conservation (C2) or Environmental Management (C3) zone will generally be applied if the primary use of the land is confirmed to be Environmental.

5. C2 and C3 Land Use Zones

Appendix 2 is an extract from the Ballina Local Environmental Plan 2012 (2013 EPI 20) detailing the zone objectives, permitted uses without consent, permitted uses with consent and prohibited activities in a C2 and C3 zone.

BSCs *existing and continuing use rights* fact sheet notes that the NSW Environmental Planning and Assessment Act 1979 (EPA Act) protects landowners from any hardship that may result from such changes by giving them the power to continue using their land under continuing use rights. Any lawful activity being carried out on the land will continue if there is a zone change.

It should be noted that there is no requirement to fence or maintain the vegetation within a C2 or C3 zone.

6. Current Planning Constraints

A desktop review of NSW planning controls indicates a number of constraints affecting the property.

Koala Habitat

Ballina Shire Koala Management Strategy (Ballina Shire Council 2017) notes that a koala population within the Bagotville, Meerschaum Vale and Wardell areas (the Southern Koala Management Precinct) meets the criteria for an 'Important Population' for the purposes of the Environment Planning and Biodiversity Conservation Act (1999).

Lot 2 Plan 604231 is mapped as Secondary (Class b) koala Habitat (**Figure 2**). This category is made up of vegetation communities occurring on soils of low to medium nutrient value whereupon primary food tree species are absent, the tallest stratum instead dominated or co-dominated by secondary food tree species only.

NSW Rural Fire Service (RFS)

Mapping by the RFS identifies that the property is in a designated bushfire prone land zone (see <https://www.rfs.nsw.gov.au/plan-and-prepare/building-on-bush-fire-prone-land/bush-fire-prone-land/check-bfpl>).

Under the [10/50 Vegetation Clearing Scheme](#), NSW residents who live near bushland can better prepare their homes for potential bushfires without having to get approval from the local council or land services office.

In the case of Lot 2 Plan 60423, the land is excluded from the operation of the 10/50 Code as it has been identified as being wholly or partially within:

- *specified Koala habitat mapped in Comprehensive Koala Plans of Management and as provided by the Department of Planning and Environment.*

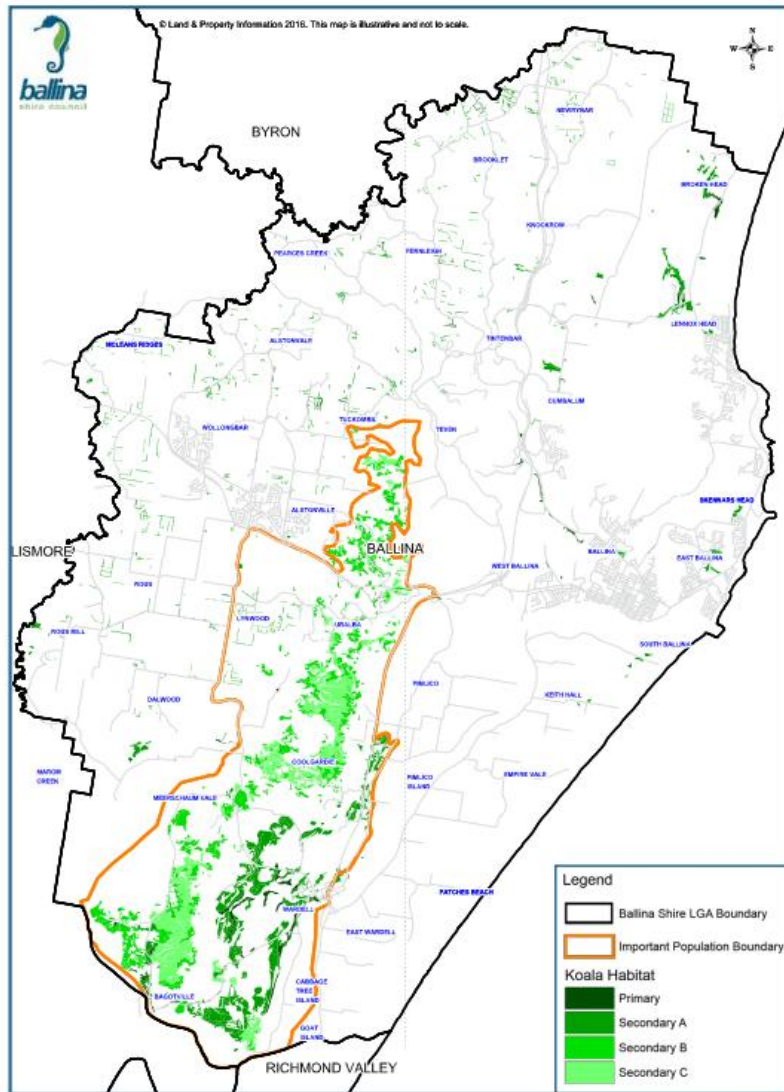


Figure 2 Preferred Koala Habitat Map for Ballina Shire (Ballina Shire Council 2017)

Biodiversity Values Map

The Biodiversity Values (BV) Map (‘the Purple Map’) is a map managed by the NSW Government that identifies land that it deems to be sensitive to impacts relating to vegetation clearing associated with development, especially developments carried out in accordance with Part 4 of the NSW Environmental Planning & Assessment Act (EP&A Act).

The parcel under review is mapped on the BV Map (**Figure 3**) because it is identified as containing *Habitat within an approved Koala Plan of Management (Koala SEPP)*.



Figure 3 Biodiversity Values Map Lot 2 Plan 60423

7. Site Assessment

The site visit involved traversing the CZone area at the property. The path walked was recorded with a GPS device and photo points taken at key points.

The key information collected through notes and photographs included:

- Evidence of koala activity
- Sightings of threatened flora and fauna
- Type of vegetation community
- Vegetation community boundaries
- Condition of vegetation (eg. Extent and type of weeds)
- Growth stage of vegetation
- Primary landuse activities
- Topography of site (eg. Slope).

After the site visit the CZone area was reviewed using current Nearthmaps aerial photography, historic aerial photography, photo points and field notes.

The CZone was then assessed against the CZone criteria listed in the NSW Department of Planning and Environment's 2015 *Northern Councils E Zone Review Final Recommendations Report* (NCEZR).

7.1 Site Visit Information

Site Visit Date: June 12 2025

Assessors: Jane Wickers, Mark Evans (EarthScapes Consulting)

The site visit path commenced at the house. The initial path was south-west across a rainforest gully. The next area surveyed was along the spur to the northern boundary of the property. The south-west and eastern boundaries of the C2 zone were observed from a distance from the road reserve. observations from the road edge to the east of the study area. The survey path and photo points are shown in **Figure 4**.

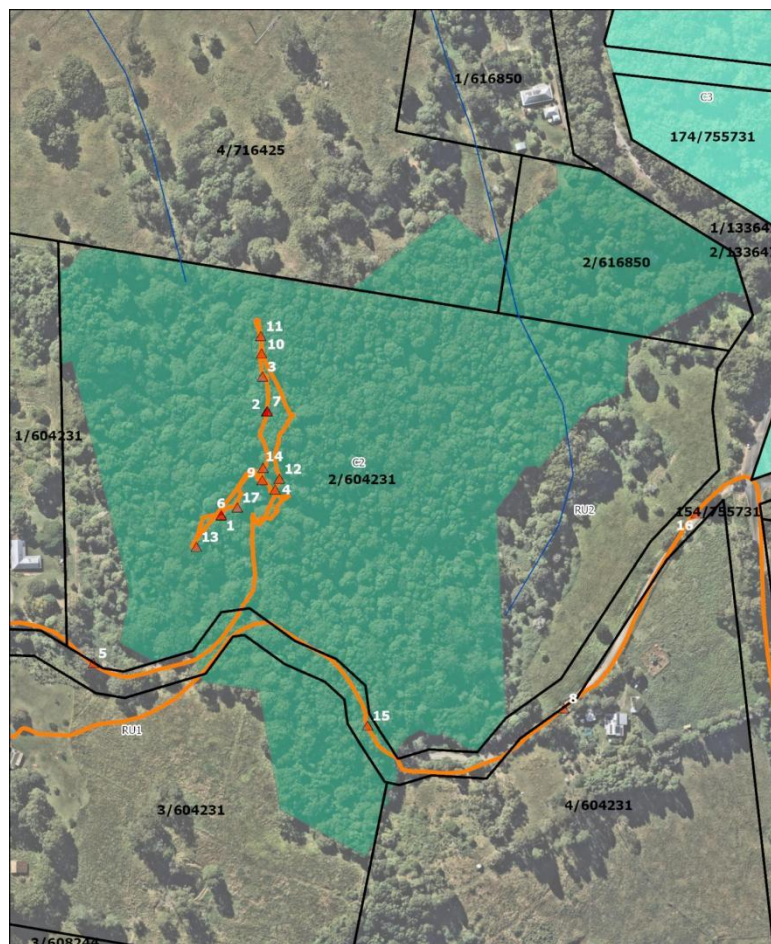


Figure 4 Site visit map - 54 Buckombil Mountain Road



North – 28m
East – 20m

East – 30m
South – 17m
West – 12m

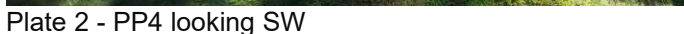




Plate 3 - PP9 looking NW

7.3 Vegetation and Key Species

The Plant Community Type (PCT) on the property is predominantly Northern Brush Box Subtropical Wet Forest (PCT 3165) with rainforest regrowth present in gullies. The vegetation is 'open forest' with poor mid storey and fair understorey.

The dominant native species in the observed during the site visit are listed in **Table 1**.

Table 1 Key native species present

Common tree species (canopy on upper slopes)	
Scientific Name	Common Name
<i>Syncarpia glomulifera</i>	Turpentine
<i>Corymbia intermedia</i>	Pink bloodwood
<i>Angophora floribunda</i>	Rough barked apple
<i>Lophostemon confertis</i>	Brushbox
Common plant species (under-storey on upper slopes)	
Scientific Name	Common Name
<i>Livistonia australis</i>	Cabbage tree palm
<i>Lomandra longifolia</i>	Mat rush
<i>Hibiscus splendens</i>	Pink hibiscus
Common rainforest trees on mid slopes	
Scientific Name	Common Name
<i>Alphitonia excelsa</i>	Red bean
<i>Flindersia schottiana</i>	Scentless rosewood
Common rainforest plants in gully	
Scientific Name	Common Name
<i>Dysoxylum mollisomum</i>	Red bean
<i>Synoum glandulosum</i>	Scentless rosewood
<i>Cordyline petiolaris</i>	Broad leaved palm lily
<i>Alpinia caerulea</i>	Ginger
<i>Willkea heugilana</i>	Veiny wilkea

7.4 Weeds

The density of weeds observed during the site visit was low. This can be attributed to the long-standing work of the landowner.

Weed species observed included Lantana (*Lantana camara*), Ochna (*Ochna serrulata*), Cocos palm (*Syagras rhomanzoffianum*), Umbrella shrub (*Schefflera arboricola*) and White passionflower (*Passiflora subpeltata*) (Plates 4 and 5).



Plate 4 - PP1 Cocos palm (*Syagras rhomanzoffianum*)



Plate 5 PP5 looking NE Lantana (*Lantana camara*)

7.5 Koalas

No Koala scats or tree scratchings were observed during the site visit.

Primary Koala feed trees were absent from the vegetation canopy.

7.6 Growth Stage

No old growth tree species were observed.

A review of historic aerial photographs from the Geoscience Australia catalogue indicate small areas of vegetation present in 1942 with the likely dominant age class of canopy from the 1970s and 1980s (Figure 6).

The historic images support the site visit finding that the vegetation is a mix of advanced regrowth and mature forest.

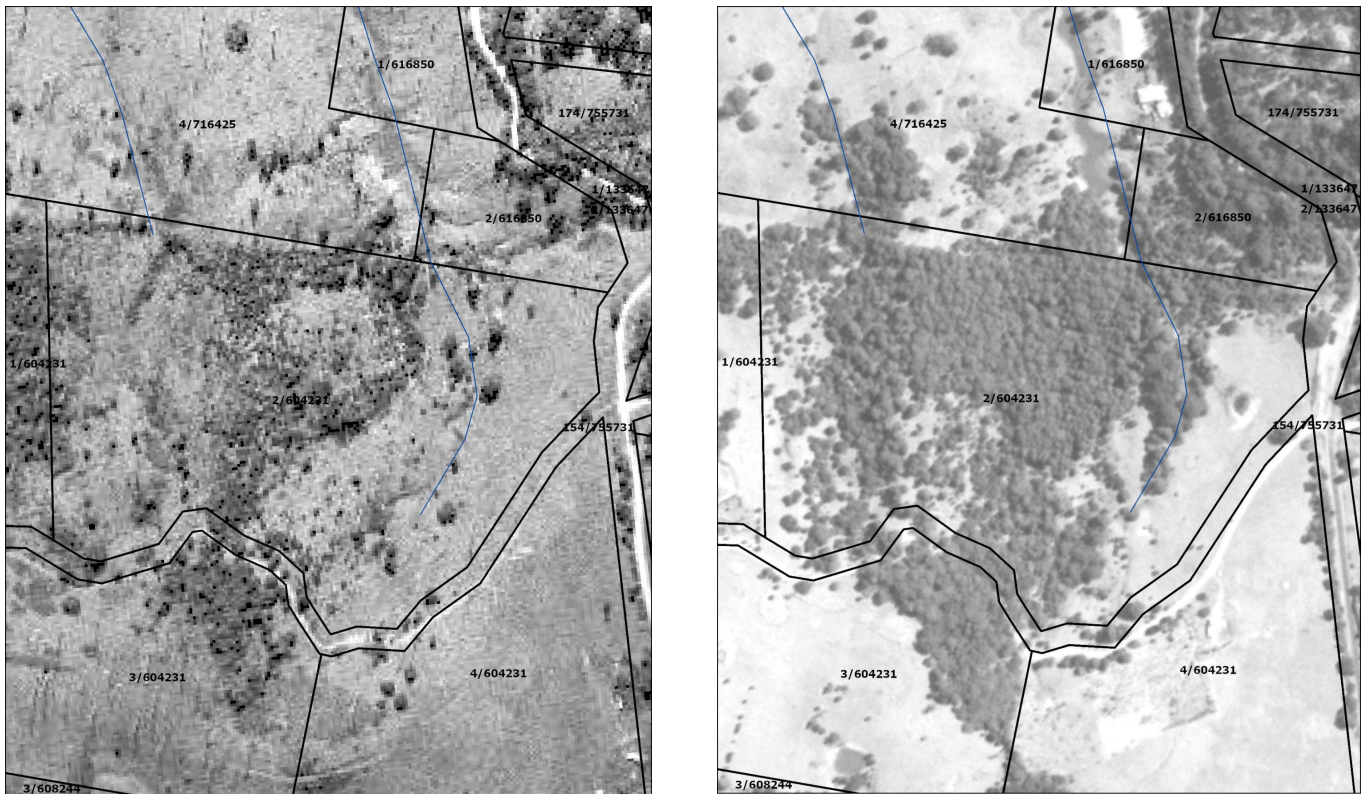


Figure 6 Historic aerial photographs of the site. Left - 1942. Right - 1989.

7.7 Threatened species

Two threatened flora species were identified in the rainforest gully west of the house:

- **Endiandra hayesii*, Rusty rose walnut (NSW BCA, vulnerable, Comm EPBC, vulnerable)
- **Endiandra meulleri* subsp. *Bracteata*, Green leaved rose walnut (NSW BCA, Endangered)

Forest oak (*Allocasuarina torulosa*) was noted at PP2. This is not a threatened species but is key habitat for Glossy Black-Cockatoos (*Calyptrorhynchus lathamii*) which is listed as vulnerable in NSW.

8. Recommendations

Whilst historically farm activities have occurred at the property there was no evidence of recent agricultural activity.

The vegetation is in good condition and Primary Landuse is Environmental.

The C2 zone is *Habitat within an approved Koala Plan of Management (Koala SEPP)*. However, the species present confirm that the vegetation is secondary Koala habitat with primary food tree species are absent.

The following recommendations are made regarding the C2 zone:

- The area of driveway, house and APZs be excised from the C2 zone and zoned rural (**Figure 7**).
- The C2 zone should be changed to C3 - Environmental Management consistent with the the neighbouring property Lot 62 DP 1185033 which has the same vegetation community with equivalent growth stage and condition. As noted in Appendix 2, C3 zoning allows for a wide range of landuse activities (subject to State planning constraints).

Permitted without consent

Environmental protection works; Extensive agriculture.

Permitted with consent

Camping grounds; Community facilities; Dwelling houses; Emergency services facilities; Environmental facilities; Farm building; Home-based child care; Information and education facilities; Intensive plant agriculture; Kiosks; Oyster aquaculture; Pond-based aquaculture; Recreation areas; Research stations; Roads; Roadside stalls; Tank-based aquaculture; Tourist and visitor accommodation; Water recreation structures.

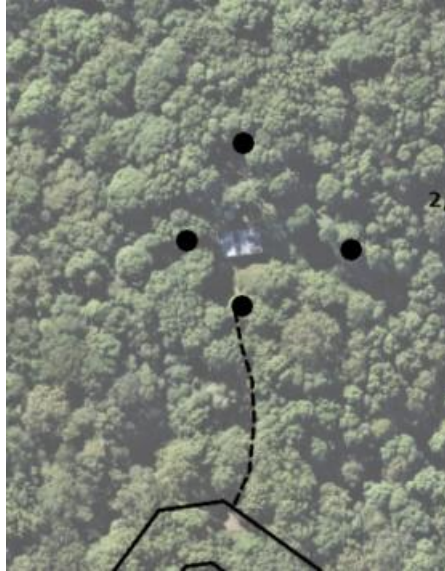


Figure 7APZ and driveway markers map

References

Ascent Ecology 2021. Identification of Proposed E2 and E3 Zones – Ballina Shire Council Integration of Certain Deferred Matters. Ascent Ecology Pty Ltd, Brunswick Heads.

Ballina Shire Council 2017. Koala Management Strategy.

Ballina Shire Council Conservation Zone Review (Integration of Certain Deferred Matter Land) Methodology Report February 2023 CM 23/2428

Ballina Shire Council 2023. Fact Sheet 5. Conservation Zone Review. Existing and continuing use rights.

NSW Department of Planning and Environment (2015). Northern Councils E Zone Review Final Recommendations Report ISBN 978-1-76039-139-3

Appendix 1 - Criteria for Application of Conservation Zones

C2 and C3 criteria from Northern Councils EZone Review Final Recommendations Report 2015.

Criteria	Description
C2 Environmental Conservation	
SEPP26 Littoral Rainforests	Land mapped as littoral rainforest in accordance with the statewide policy for littoral rainforest protection (<i>State Environmental Planning Policy 26 – Littoral Rainforests</i>).
SEPP14 Coastal Wetlands	Land mapped as coastal wetlands in accordance with the statewide policy for coastal wetland protection (<i>State Environmental Planning Policy 14 – Coastal Wetlands</i>).
Endangered Ecological Communities (EECs) listed under the <i>Threatened Species Conservation Act 1995</i> and/or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .	Land containing vegetation communities listed as Endangered Ecological Communities under the <i>Threatened Species Conservation Act 1995</i> (TSC)¹ and the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC)². The <i>Far North Coast Regional Conservation Plan</i>³ lists the following vegetation communities as examples of EECs that currently exist on the Far North Coast: <i>Byron Bay Dwarf Graminoid Heath Community, Coastal Cypress Pine Forest, Coastal Saltmarsh, Freshwater Wetlands in Coastal Floodplains, Littoral Rainforest, Lowland Rainforest, Lowland Rainforest on Floodplains, Subtropical Coastal Floodplain Forest, Swamp Oak Floodplain Forest, Swamp Sclerophyll Forest on Coastal Floodplains, Themeda grassland on Seacliffs and Coastal Headlands, White Gum Yellow Gum Blakely's Red Gum Woodland, and White Gum Moist Forest.</i> Other vegetation communities may be added consistent with these Acts in the future.
Key Threatened Species Habitat	This criterion includes: - old-growth forests where the overstorey or canopy trees are in the late mature stage of growth⁴; - areas of predicted high conservation value for forest fauna assemblages, refugia, endemic forest fauna or endemic invertebrates⁵; and - habitats for threatened species or endangered populations that cannot withstand further loss where the threatened species or endangered population is present⁶.

Over-cleared vegetation communities	Land comprising: 1. over-cleared vegetation communities, where more than 70% of the original (pre 1750) extent of the native vegetation type has been cleared⁷ and 2. native vegetation in over-cleared Mitchell landscapes⁸. The <i>Far North Coast Regional Conservation Plan</i> lists the following as examples of: ▪ Over-cleared vegetation communities on the Far North Coast⁹: – Rainforests, Wet sclerophyll forests (shrubby and grassy subformations), Dry sclerophyll forests (shrubby and shrub/grass subformations), Grassy woodlands, Grasslands (Themeda australis sod tussock), Heathlands, Forested wetlands, Freshwater wetlands, Saline wetlands; and ▪ Over-cleared Mitchell landscapes⁹: – Byron–Tweed Alluvial Plains, Byron–Tweed Coastal Barriers, Clarence–Richmond Alluvial Plains and Upper Clarence Channels and Floodplains.
Culturally significant lands	Areas of culturally significant lands such as Aboriginal object sites, Aboriginal places of heritage significance and other significant objects identified by the local Aboriginal community ¹⁰ .

C3 Environmental Management

Riparian and estuarine vegetation and wetlands	Land comprising riparian and estuarine vegetation on <i>waterfront land</i> , defined under the <i>NSW Water Management Act 2000</i> , or wetland areas other than those mapped as SEPP14 Coastal Wetlands. Waterfront land is defined under the <i>NSW Water Management Act 2000</i> as the bed of any river, lake or estuary and any land within 40 metres of the river banks, lake shore or estuary mean high water mark.
Rare, Endangered and Vulnerable Forest Ecosystems	Land comprising areas of rare, endangered and vulnerable forest ecosystems as defined by the <i>JointANZEC/MCFFA National Forest Policy Statement Implementation sub-committee (JANIS)</i> (Commonwealth of Australia 1997) ¹¹ .
Native vegetation on coastal foreshores	Native vegetation on land with frontage, or adjoining or adjacent to, a beach, estuary, coastal lake, headland, cliff or rock platform.

¹ <http://www.environment.gov.au/biodiversity/threatened/communities/nsw-act>

² <http://www.environment.nsw.gov.au/threatenedspeciesapp/default.aspx?keywords>

³ Far North Coast Regional Conservation Plan, NSW Environment Climate Change and Water, 2010, p24 ⁴ <http://www.epa.nsw.gov.au/resources/pnf/OGRFreviewFieldIdent.pdf>

⁵ Scotts, D 2003, Key Habitats and Corridors for Forest Fauna: A Landscape Framework for Conservation in Northeast New South Wales, NPWS Occasional Paper no. 32, National Parks and Wildlife Service, Sydney, NSW.

⁶ NSW Office of Environment and Heritage 'Threatened Species Profiles Database' <http://www.bionet.nsw.gov.au>

⁷ Keith, DA 2006, Ocean Shores to Desert Dunes the Native Vegetation of New South Wales and the ACT, Department of Environment and Climate Change, Hurstville.

⁸ Mitchell, PB 2002, 'NSW Ecosystems Study: Background and Methodology', report prepared for National Parks and Wildlife Service, Hurstville, NSW and Far North Coast Regional Conservation Plan, NSW Environment Climate Change and Water, 2010, p27.

⁹ Far North Coast Regional Conservation Plan, NSW Environment Climate Change and Water, 2010, p26

¹⁰ Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW, NSW Department of Environment, Climate Change & Water (2011)

¹¹ Refer to Appendix 1 of the Department's Final Recommendations Report.

Appendix 2 - C2 and C3 Zone Land Use Table

CZones are designed to recognise and protect land that has important environmental value.

C2 Environmental Conservation

Objectives of zone

- ◆ To protect, manage and restore areas of high ecological, scientific, cultural or aesthetic values.
- ◆ To prevent development that could destroy, damage or otherwise have an adverse effect on those values.

Permitted without consent

Environmental protection works.

Permitted with consent

Dwelling houses; Environmental facilities; Extensive agriculture; Oyster aquaculture; Research stations; Roads.

Prohibited

Business premises; Hotel or motel accommodation; Industries; Multi dwelling housing; Pond-based aquaculture; Recreation facilities (major); Residential flat buildings; Restricted premises; Retail premises; Seniors housing; Service stations; Tank-based aquaculture; Warehouse or distribution centres; Any other development not specified in item 2 or 3.

C3 Environmental Management

Objectives of zone

- ◆ To protect, manage and restore areas with special ecological, scientific, cultural or aesthetic values.
- ◆ To provide for a limited range of development that does not have an
- ◆ adverse effect on those values.

Permitted without consent

Environmental protection works; Extensive agriculture.

Permitted with consent

Camping grounds; Community facilities; Dwelling houses; Emergency services facilities; Environmental facilities; Farm building; Home-based child care; Information and education facilities; Intensive plant agriculture; Kiosks; Oyster aquaculture; Pond-based aquaculture; Recreation areas; Research stations; Roads; Roadside stalls; Tank-based aquaculture; Tourist and visitor accommodation; Water recreation structures.

Prohibited

Backpackers accommodation; Hotel or motel accommodation; Industries; Intensive livestock agriculture; Multi dwelling housing; Residential flat buildings; Retail premises; Seniors housing; Service stations; Serviced apartment; Warehouse or distribution centres; Any other development not specified in item 2 or 3.