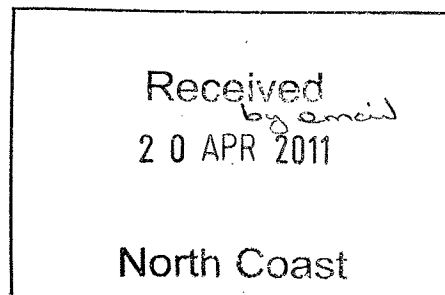




BSC File No: PLN560035 #1081225
Contact: Matt Walker

20 April 2011

Mr Jim Clark
Department of Planning
Locked Bag 9022
GRAFTON NSW 2460



Dear Jim,

Planning Proposal for a dwelling entitlement on Lot 438 DP 729107, Broken Head Road, Byron Bay

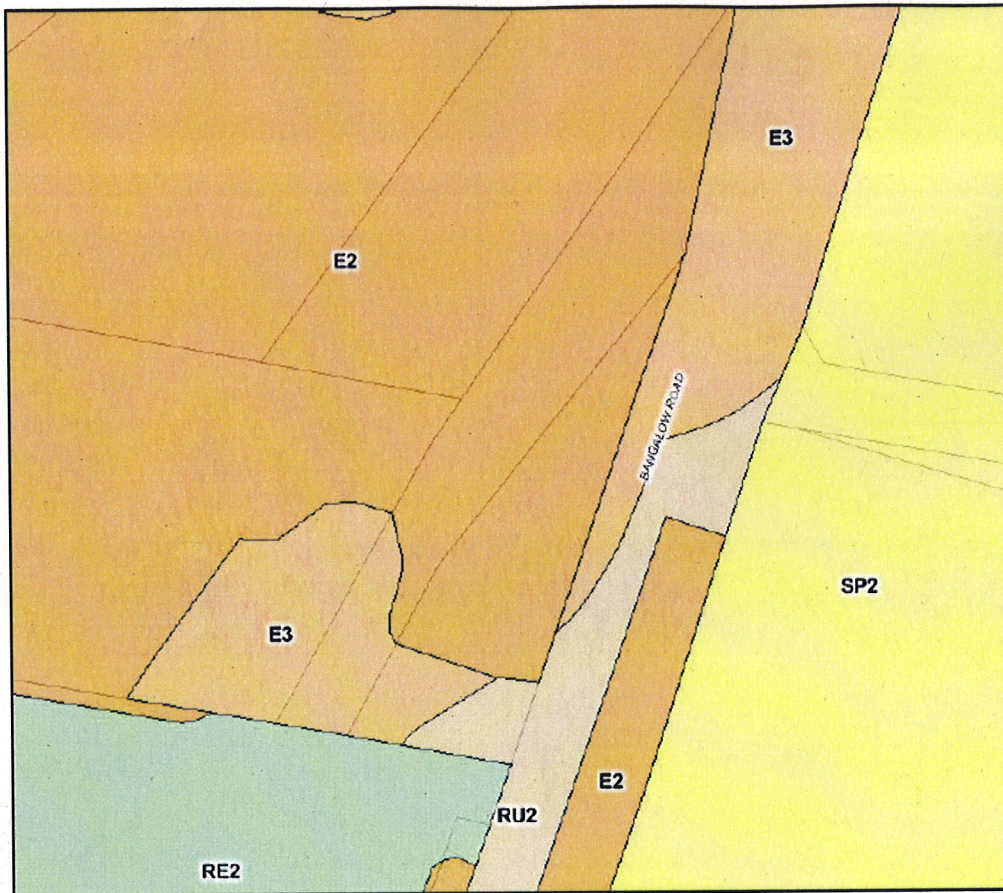
Council was approached in mid 2010 by Arakwal and Hinterland Legal about the future zoning of a number of properties held or soon to be held in Arakwal ownership in the draft Shire-wide LEP. The particular properties in question include a parcel of Crown land (Lot 438) and the adjoining road reserve to the west. These allotments have been identified as part of the ILLUA Agreement for Aboriginal ownership however they do not contain a dwelling entitlement in accordance with clause 15 of the *Byron LEP 1988*.

The matter was reported to Council at its meeting of 24 June 2010 as a possible amendment to the *Byron LEP 1988*. Council resolved (10-492) that a planning proposal should be prepared for an amendment to the Byron LEP 1988. The Council resolution was as follows:

10-492 **Resolved** that a Planning Proposal, funded by the applicant, be prepared to amend the Byron 1988 LEP to provide for a dwelling entitlement under Schedule 7 for Lot 438 DP 729107 including the road reserve to the west.

In Accordance with Section 56 of the *Environmental Planning and Assessment Act 1979*, Council submits the enclosed planning proposal. A Flora and Fauna assessment and Bushfire Hazard Assessment has been carried out and included in the Planning Proposal. The proposal also includes details as to the proposed location of the future dwelling however Council is not assessing the location of a dwelling which would need to be determined following lodgement of a Development Application.

Given the current 1(d) Investigation zoning of the subject land, the proposal is not seeking to rezone the property only to include it within Schedule 7 of the LEP 1988 as containing a dwelling entitlement. Under the draft Shire-wide LEP the land is proposed to be zoned a mix of E2, E3 and RU2 which may need to be amended depending upon the future location of a dwelling on the subject land. The minimum lot size map for the area is currently 40Ha which also may need to be amended following the outcome of this proposal. Below is the draft zoning map from the Shire-wide LEP:



It is intended that the planning proposal be progressed as an amendment to the *Byron Local Environmental Plan 1988*. Should you have any enquiries please contact Matt Walker on 02 6626 7068.

Yours sincerely

A handwritten signature in black ink, appearing to be 'W. Bertram'.

Wayne Bertram
Acting Executive Manager
Environment and Planning

Enc: Planning Proposal – Dwelling Entitlement Lot 438 DP 729107, Broken Head Rd Byron Bay #1076432

PLANNING PROPOSAL

to
Byron Shire Council
for

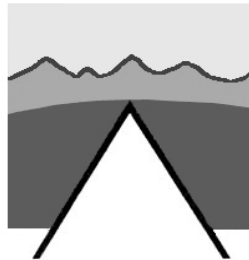
Amendment to Byron LEP 1988 Dwelling Entitlement under Schedule 7

for

Bundjalung of Byron Bay Aboriginal Corporation

**Lot 438 DP 729107
Broken Head Road, Byron Bay**

by



Balanced
Systems
Planning
Consultants

**P.O. Box 36 Bangalow 2479
Email: balanced@exemail.com.au
Ph. & Fax (02) 66895301**

March 2011

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SUMMARY

The land, subject to this Planning Proposal, is Lot 438 DP 729107, Broken Head Road, Byron Bay. This land is located on the southern edge of Byron Bay and has sealed road frontage with sewer, water, telephone and electricity services available. A summary of the justification for the Planning Proposal, in accordance with the Department of Planning Guidelines for preparing planning proposals, is as follows:

- **Objectives or Intended Outcomes** of the proposed LEP

To enable a dwelling to be erected on the site for housing of a member family of the Bundjalung of Byron Bay Aboriginal Corporation.

- **Explanation of the Provisions** that are to be included in the proposed LEP

The identified land will be included within Schedule 7 of the Byron LEP 1988 thus permitting a dwelling.

- **Justification** for those objectives, outcomes and provisions and the process for their implementation

Need for the planning proposal – The proposal allows for the creation of a dwelling to provide a housing opportunity to a member family of the Bundjalung of Byron Bay Aboriginal Corporation.

Relationship to strategic planning framework – the proposal assists in the implementation of the ILLUA Agreement for Aboriginal ownership. The proposal is consistent with all applicable SEPPs.

Environmental, social and economic impact – The attached ecological and bushfire assessments identify the likely impacts and opportunities for mitigation. Positive social impacts will occur.

- **Community Consultation** that is to be undertaken on the planning proposal

Consultation has occurred with the only residential neighbour. The Planning Proposal will be exhibited in accordance with the Department of Planning guidelines 'A Guide to Preparing Planning Proposals'.

1 Introduction

The land, subject to this Planning Proposal, is Lot 438 DP 729107, Broken Head Road, Byron Bay. The land (see yellow highlight in Figure 1 below) has an area of some 0.45 ha. and is currently within Zone 1(d) (Investigation Zone of the Byron LEP, 1988). A road reserve adjoins its western boundary (see blue highlight in Figure 1 below) while the subject land has sealed road frontage with an existing access driveway and sewer, water, telephone and electricity services immediately available.

Immediately to the south of the land is the Red Devils Rugby League Grounds while Byron Bay High & St Finbarrs schools are located to the east.



Figure 1 – Site and Immediate Locality

This planning proposal is prepared in accordance with the Department of Planning guidelines 'A Guide to Preparing Planning Proposals' and 'A Guide to Preparing Local Environmental Plans'.

The planning process to assess the suitability of the site for a dwelling has taken into account the specialist flora and fauna and bushfire assessments, together with consultation with the adjoining neighbour and other criteria such as the existing driveway and services.

The proposed dwelling site is considered the preferred site following this assessment.

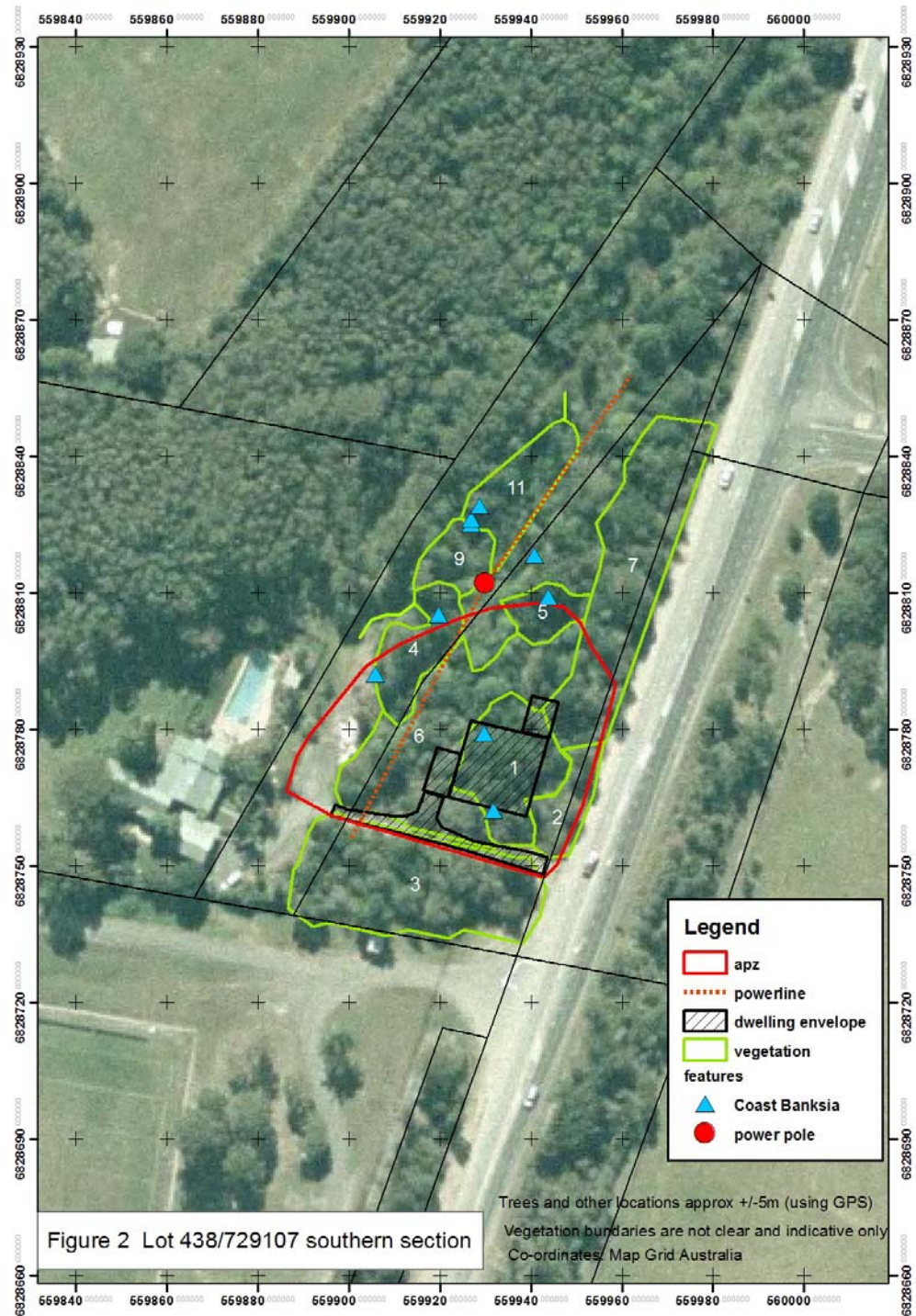


Figure 2 – Dwelling Envelope Details

2 Proposal objectives and outcomes

2.1 Objectives

The objectives are:

- to insert the land within Schedule 7 of the Byron LEP 1988 so as to permit a dwelling on the site.

2.2 Outcomes

The outcomes of the rezoning which will include:

- Provision of a housing opportunity for a member family of the Bundjalung of Byron Bay Aboriginal Corporation
- Further implementation of the ILLUA Agreement for Aboriginal ownership
- Ecological restoration in compensation for the vegetation disturbance
- A settlement pattern consistent with the locality

3 Explanation of provisions in local plan

The objective of the Planning Proposal will be achieved by the inclusion of the subject land within Schedule 7 of the Byron Local Environmental Plan, 1988 in accordance with the Council's resolution of 24 th June 2010. The resolution, 10-492, read as follows:

'Resolved that a Planning proposal, funded by the applicant, be prepared to amend the Byron LEP 1988 to provide for a dwelling entitlement under Schedule 7 for Lot 438 DP 729107 including the road reserve to the west.'

4 Justifications for objectives, outcomes & provisions

4.1 Need for planning proposal

The need for the Planning Proposal arises as Council is a stakeholder of the further implementation of the ILLUA Agreement for Aboriginal ownership. The subject land requires a dwelling entitlement which will result in a housing opportunity for a member family of the Bundjalung of Byron Bay Aboriginal Corporation.

4.1.1 Previous strategic studies

This Planning Proposal enacts the Council resolution 10-492, seeks to provide for a dwelling entitlement under Schedule 7 for Lot 438 DP 729107 including the road reserve to the west.'

The earlier *Byron Shire Local Environmental Study, 2008* (LES) reported on the land as follows:

Lot 438 is a small lot (0.45 ha) of Crown Land entirely within the 1(d) zone. This land is largely vegetated with swamp sclerophyll vegetation. It has one small patch of cleared land near its southern edge which is really an access road to the property that it abuts to the west.

South of this access road is a patch of regrowth vegetation that is of low ecological value. There is no dwelling currently on the lot. It should be predominantly zoned E2 to reflect its vegetation. The small patch at its southern end should be zoned E3 to reflect its wildlife corridor function, linking surrounding vegetation.

This Planning Proposal is not inconsistent with the Byron LES 2008.

4.1.2 Achieving objectives, outcomes & alternatives

The objectives and intended outcomes of the Planning Proposal are best achieved by amending the LEP 1988, in the manner proposed, so that the future use of the land can be resolved now.

The type and content of the amendment is a well used format utilised by Council and the NSW Department of Planning for similar proposals already implemented.

4.1.3 Community benefits

The community benefits resulting from progressing the Planning Proposal include the provision of housing opportunities for the Bundjalung of Byron Bay Aboriginal Corporation, together with compensatory habitat restoration.

4.2 Relationship to strategic planning framework

4.2.1 Regional strategy

The Far North Coast Regional FNCRS 2006 - 31 (FNCRS 2006 - 31) is the regional strategy applicable to the land. The Strategy consolidates and builds on the previous regional strategy and the local Council residential strategies.

The rezoning of the land is not inconsistent with the intent of the Far North Coast Regional FNCRS 2006 - 31.

4.2.2 Local strategic plans

There are a number of local strategic plans which have been followed up by the LES 2008 which combines information from all local strategic plans along with further studies. The LES is the review of social, economic and environmental issues relevant to the review of landuse controls within the Byron shire. The Planning Proposal is not inconsistent with the future strategic direction of the Byron Shire LES 2008 and the draft shire-wide LEP.

4.2.3 State environmental planning policies

A number of State Environmental Planning Policies (SEPPs) apply to the land. The following identifies each of the key Policies and makes brief comment in regards to each.

- *SEPP 14 Coastal Wetlands*

There are no identified SEPP 14 wetlands on the site.

- *SEPP 26 Littoral Rainforests*

There are no identified SEPP 26 littoral rainforests on the site.

- *SEPP 44 Koala Habitat Protection*

The identified land is not subject to the provisions of the Policy as the land is not greater than 1 ha. in area. The land does not contain potential koala habitat and as not more than 15% of the trees are koala food trees.

- *SEPP 55 Remediation of Land*

A preliminary land contamination assessment will need to be undertaken and approved at the time development is proposed on the 'rezoned' land.

- *North Coast Regional Environmental Plan (NCREP)*

The NCREP, now a deemed SEPP, specifies objectives and directions on a range of matters to be met and undertaken by Councils when preparing local environmental plans and considering development applications.

Relevant provisions of the REP which apply when considering this planning proposal on the subject site have been assessed. The application is considered consistent with the REP as the proposal provides a housing opportunity in a suitable manner.

4.2.4 Ministerial directions

A number of Ministerial Directions made under Section 117 of the Environmental Planning and Assessment Act 1979 apply to the proposal. The following identifies each of the key Directions which are relevant to the land and Planning Proposal and makes brief comment in regards to each.

- *Direction 1.2 - Rural Zones*

The objective of this direction is to protect the agricultural production value of rural land. The proposal does not prejudice agricultural potential or existing agricultural enterprises. No part of the land subject to this Planning Proposal is mapped within the Farmland Protection policy. The Planning Proposal is not inconsistent with this Direction.

- *Direction 1.3 - Mining, Petroleum Production and Extractive Industries*

The objective of this direction is to future extraction of State or regionally significant reserves of coal, other minerals, petroleum and extractive materials are not compromised by inappropriate development. The land is not subject to this direction.

- *Direction 1.5 - Rural Lands*

The objectives of this direction are to:

- (a) protect the agricultural production value of rural land,
- (b) facilitate the orderly and economic development of rural lands for rural and related purposes.

The Planning Proposal is not inconsistent with this Direction.

- *Direction 4.1 - Acid sulfate Soils*

The Planning Proposal is not inconsistent with this Direction.

- *Direction 4.3 - Flood Prone Land*

The Planning Proposal is not inconsistent with this Direction.

- *Direction 4.4 - Planning for Bushfire Protection*

The objectives of this direction are:

Planning Proposal

- (a) to protect life, property and the environment from bush fire hazards, by discouraging the establishment of incompatible land uses in bush fire prone areas, and
- (b) to encourage sound management of bush fire prone areas.

The site is mapped as Bushfire Prone. Management of development in bushfire prone land is subject to existing provisions of Section 79BA of the Environmental Planning and Assessment Act 1979 and Section 100B of the Rural Fires Act 1997. The proposal is able to achieve consistency with the bushfire management criteria listed in Clause 6 of the Direction and *Planning for Bushfire Protection 2006*. Council is to consult with the Commissioner of the NSW Rural Fire Service as part of the assessment of the Planning Proposal. The bushfire assessment within Appendix B addresses the requirements of *Planning for Bushfire Protection 2006*.

- *Direction 5.1 - Implementation of Regional Strategies*

The Planning Proposal is not inconsistent with the overall intent of the Strategy 2006 – 31 and is of minor significance and achieves the overall intent of the regional strategy and does not undermine the achievement of its vision, land use strategy, policies, outcomes or actions.

- *Direction 5.3 - Farmland or State and Regional Significance on the NSW Far North Coast*

The objectives of this direction are:

- (a) to ensure that the best agricultural land will be available for current and future generations to grow food and fibre,
- (b) to provide more certainty on the status of the best agricultural land, thereby assisting councils with their local strategic settlement planning, and
- (c) to reduce land use conflict arising between agricultural use and non-agricultural use of farmland as caused by urban encroachment into farming areas.

No part of the land subject to this Planning Proposal is mapped within the Farmland Protection policy.

- *Direction 6.1 - Approval and Referral Requirements*

The proposed rezoning of the land does not seek to any additional approval and referral requirements or change the LEP 1988 other than the an addition to Schedule 7. The Planning Proposal is consistent with the Direction.

- *Direction 6.3 - Site Specific Provisions*

The Planning Proposal is considered consistent with the Direction and reflects Council's and the DoP's standard LEP amendment practice for this type of development. No development standards or requirements in addition to those contained within the Byron LEP are to be imposed.

4.3 Environmental, social and economic impact

4.3.1 Critical habitat, threatened species

The site characteristics and constraints allows for the provision of a housing opportunity where ecological impacts are minimized and mitigation measures can be employed. The specialist assessment within Appendix A addresses the impacts on critical habitat or threatened species, populations or ecological communities, or their habitats.

4.3.2 Environmental effects and management

The key possible environmental effects of the use of the land comprising the proposed dwelling on the site are as follows:

- *Ecological impacts and enhancement*

A specialist ecological assessment of the impacts of the proposal has been undertaken and is contained within Appendix A. While the proposal requires the removal of native vegetation as described within the report, the report recommends mitigation measures and compensation for the vegetation loss.

- *Bushfire management*

A bushfire assessment of the proposal has been undertaken to assess the ability of the proposal to comply with Planning for Bushfire Protection 2006. Appendix B contains the assessment.

The proposal is able to achieve consistency with bushfire management criteria conforming with Planning for Bushfire Protection 2006 as described within the report in Appendix B.

- *Protection of water systems*

The erection of a dwelling on the site as proposed will not adversely impact on water systems.

- *Traffic impacts*

The additional traffic generated by the single dwelling will not exceed the capacity of the local road system. The site has an existing driveway in a suitable location to the local road system.

4.3.3 Social and economic effects

The implementation of the concept within the proposal will result in positive social impacts especially for the applicant, the Bundjalung of Byron Bay Aboriginal Corporation.

4.4 State and Commonwealth interests

4.4.1 Public infrastructure

The land is able to be readily serviced by sewer, water, electricity and telecommunication services.

Other public infrastructure in the form of community facilities and recreation facilities are conveniently available in nearby Byron Bay and Suffolk Park. A primary school and a high school are located opposite the site.

4.4.2 State and Commonwealth consultation

This section of the Planning Proposal will be completed following consultation with State and Commonwealth agencies identified in the 'gateway exhibition and determination process'.

5 Community consultation

The Planning Proposal will be exhibited in accordance with the Department of Planning guidelines 'A Guide to Preparing Planning Proposals'.

Initial consultation has occurred with the only nearby residential neighbour. The placement of the proposed house site has taken into account issues relevant to the neighbour such as privacy.

References

1. Byron Shire Council. Byron Local Environmental Plan 1988, as amended.
2. Parsons Brinkerhoff & Byron Shire Council. Byron Local Environmental Study 2007.
3. Byron Shire Council. Draft Byron Local Environmental Plan 2008.
4. NSW Dept of Planning. Far North Coast Regional FNCRS 2006 - 31 (FNCRS 2006 - 31).
5. Department of Planning. 'A Guide to Preparing Planning Proposals' & 'A Guide to Preparing Local Environmental Plans'

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APPENDIX A

Ecological Assessment

FLORA AND FAUNA ASSESSMENT

**GATEWAY REZONING TO CREATE A SINGLE
DWELLING ENTITLEMENT**

**Lot 438 DP729107 CROWN PARCEL, BANGALOW
ROAD**



A report prepared for the Bundjalung of Byron Bay Aboriginal
Corporation by:
David Milledge and Barbara Stewart
Landmark Ecological Services Pty Ltd (ABN 29 064 548 876, ACN
064 548 876)
PO Box 100, Suffolk Park 2481
Phone 6680 8889
Email landmark@landmarkonline.com.au

March 2011

Flora and Fauna Assessment

Gateway Rezoning to Create a Single Dwelling Entitlement

Lot 438 DP 729107 Crown Parcel, Bangalow Road

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1 Background

Landmark Ecological Services Pty Ltd (Landmark) was engaged by the Bundjalung of Byron Bay Aboriginal Corporation through Balanced Systems Planning Consultants to provide a flora and fauna assessment for a Gateway Rezoning to create a single dwelling entitlement at Lot 438 Dp729107 Crown Parcel, Bangalow Road. As part of the proposal, a dwelling entitlement will be created on the Lot, potentially impacting the ecological values of the site while also providing opportunities for restoring a degraded environment.

The Minister for Lands has agreed to transfer the Bangalow Rd parcel (Lot 438 DP729107) (**Figure 1**) to the Bundjalung of Byron Bay Aboriginal Corporation under the Second Indigenous Land Use Agreement (ILUA) (subject to the resolution of an encroachment issue involving a driveway access to Lot 320 DP755695 to the west of Lot 438.)

Byron Shire Council's proposal regarding the resolution of the encroachment issue involves the creation of a road reserve over the current access to Lot 320 and an additional area to the southern boundary of Lot 438 (shown in yellow on **Figure 1**).

The remaining part of the council road between Lot 438 and Lot 320 is proposed to be closed and the part not used for the access road to Lot 320 would be transferred by the Council to the Corporation (shown in green on **Figure 1**).

The closed road area will also be affected by an easement for electricity supply (existing line shown in **Figure 2**).

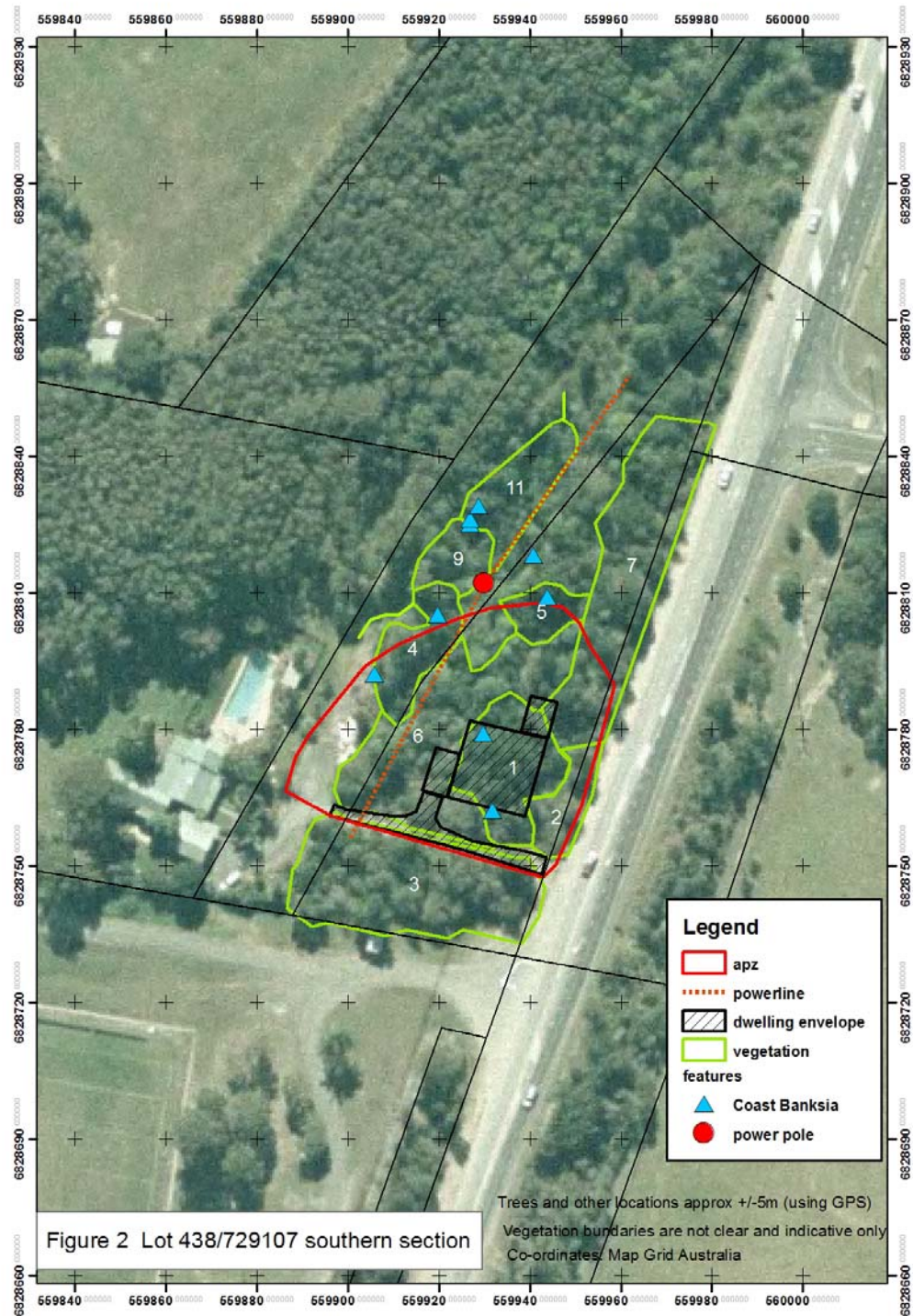


Figure 1 Lot 438 and surrounds.

Current road reserve = green

Proposed new road reserve = yellow

Lot 438 lies east of current road reserve, including eastern section of proposed new road reserve.



The southern section of Lot 438 and Council road reserve adjacent to the west (as encompassed in **Figure 2**) were considered to constitute the **subject site** for the purposes of the flora and fauna assessment. The northern section of Lot 438 and Council road reserve were also considered for context and as possible locations for compensatory restoration works.

Landmark was engaged to conduct a preliminary inspection of the site to identify ecological constraints to the placement of a dwelling and associated infrastructure, and for re-location, if required, of the access easement to Lot 320. In conjunction with advice from other disciplines and consultation with the Corporation, a proposal was developed to include an envelope for a dwelling, associated infrastructure and bushfire asset protection zones. The proposed dwelling was located to comply with all requirements for dwelling and access easements (the existing access to Lot 320 was to be retained) while minimizing ecological impacts. Measures to compensate for the remaining ecological impacts were to be included in the proposal.

Landmark was then requested to undertake a flora and fauna assessment for the impact of the proposal.

This report:

- briefly describes the **subject site** and surrounds;
- identifies a location for a dwelling and associated infrastructure that complies with all constraints while ecological impacts approach the minimum possible;
- describes the possible impacts of the proposed dwelling entitlement on flora and fauna values;
- recommends compensatory restoration works and other mitigation measures; and
- predicts the outcomes of statutory assessments for the ecological impacts of the proposal that will be required at the Development Application stage.

2 Methods

2.1 Targeted Threatened species

A list of Threatened flora species (TSC ACT 1995) to be considered for targeted searches during the site inspection and assessment was compiled. Species recorded within a 10 x 10 km square centred on the subject site were listed. The lists were based on an extract from the NSW National Parks and Wildlife Service's Atlas of NSW Wildlife (the Wildlife Atlas) (online, October 2010). Threatened fauna background information included a substantial database of records of significant species from adjacent habitats (derived from records in the Wildlife Atlas, unpublished reports and local knowledge).

2.2 Site inspection

A preliminary site inspection was conducted in September 2010 to identify ecological constraints guiding the placement of components of the proposal. Additional site inspections were conducted on 10 October, 24 November, 8 December 2010 and 18 March 2011.

The vegetation at the **subject site** was inspected to describe the vegetation in terms of floristics and structure. For the subject site and the northern sections of Lot 438 and the road reserve, fauna habitats were documented together with opportunistic records of vertebrate species. Systematic survey methods were not employed for fauna investigations because of the small size of the Lot, the high level of past disturbance and budgetary and time constraints. Records of threatened species in the surrounds were also available to guide assessment.

Vegetation type boundaries at the **subject site** were located, marked at key points with GPS waypoints and later transferred to a map using waypoints in conjunction with an air photo. Some individual trees of ecological importance (Coast Banksia *Banksia integrifolia*) were also marked. Meandering transects were employed to search for flora species of conservation significance.

Vegetation likely to constitute or include Endangered Ecological Communities (EECs) listed on schedules of the Threatened Species Conservation Act 1995 (TSC Act) were examined to confirm the presence of the EEC and to determine the EEC boundaries. The Scientific Committee's determinations were used as the basis for identifying the EECs. Where relevant, edaphic factors were also considered.

In particular, determinations for the following two EECs, considered likely to occur at the subject site were employed:

Table 1 Endangered Ecological Communities

Full name	Short name
Coastal Cypress Pine Forest in the NSW North Coast Bioregion	Coastal Cypress Pine Forest
Littoral Rainforest in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Littoral Rainforest

2.3 Limitations

It is unlikely that threatened flora species are present undetected, though seasonal surveys are necessary to detect species that are dormant or inconspicuous for part of the year; such species may be undetected or under-represented in the present survey.

Delineation of vegetation types and mapping of vegetation boundaries is subjective and somewhat arbitrary. The vegetation is highly variable at small spatial scales, comprising a mosaic of disturbed vegetation types with diffuse boundaries.

Individual trees of Coast Banksia are plotted (**Figure 2**) – these are components of the Littoral Rainforest EEC and are an important fauna resource. Most, but possibly not all, medium to large individuals in the **subject site** are plotted.

The fauna assessment is based on fauna habitats noted during the site inspection together with records from similar adjacent habitats. When observation time is limited, only a small unrepresentative sample of the fauna is usually recorded opportunistically. Habitats and particular attributes provide a more representative surrogate for assessment, but there can be no certainty with predictions of occurrence based on habitat assessment.

3 Site description

3.1 Physical

The subject site is situated on the southern edge of Byron Bay township. The site is level except for a drain close to its northern boundary.

The soil at the site has been mapped as “variant a” of the East Ballina Soil Landscape (Eolian Landscape Group) as mapped by Morand (1994). This soil landscape comprises transgressive Quaternary (Pleistocene) dunes overlying barrier sands and deltaic alluvium.

3.2 Existing mapping

The **subject site** and the northern sections of Lot 438 and the road reserve are mostly mapped as High Conservation Value vegetation, wildlife corridor, and koala habitat (BSC 2004 and derivations from associated mapping). These issues constrain the majority of the land; however, there is an 1800m² portion along the southern boundary that is free of all but the wildlife corridor constraint. This portion of land was assessed in the Local Environment Study as ‘a patch of regrowth vegetation that is of low ecological value’ (BSC 2010).

Existing mapping and its derivations are based on broad air photo interpretation with limited, if any, ground truthing, and desktop analysis. The current survey provided an opportunity to assess the vegetation and its habitat values at a finer scale, with the benefit of ground inspection.

4 Vegetation and flora species

4.1 Vegetation

The vegetation at the **subject site** consisted of a fine-scale mosaic of disturbed vegetation types (**Table 2, Figure 2**) with canopy dominants in forested polygons including rainforest species, Swamp Turpentine *Lophostemon suaveolens*, Paperbark *Melaleuca quinquenervia* and Coast Cypress Pine *Callitris columnellaris*. Shrubland dominated by Coast Ti-tree *Leptospermum laevigatum* and Tree Broom-heath *Monotoca elliptica* was also present.

A number of large specimens of Cadaghi *Eucalyptus torelliana* are present. Cadaghi and Coast Ti-tree are non-local natives and regarded as environmental weeds at this location. In addition, garden plants are present, particularly in the road reserve and along the access track, and include invasive environmental weeds.

Disturbed vegetation of broadly similar composition extends to the northern section of the Lot. Paperbark swamp sclerophyll forest adjoins to its northwest.

4.2 Endangered Ecological Communities

Two EECs were recognized - Littoral Rainforest and Coast Cypress Pine Forest (**Table 2**). Assignment of mapped vegetation units to an EEC is indicative only, as EECs are defined by descriptions provided in the Scientific Committee's determinations for each EEC and are subject to ecological interpretation. Determinations may overlap e.g. littoral rainforest species are listed as components of the Coast Cypress Pine EEC. Elements of the Littoral Rainforest EEC are present in much of the vegetation at the **subject site**, including types with non-rainforest canopy dominants. Some of this vegetation has potential to develop into littoral rainforest in the future. In addition, communities in various stages of degradation and sparsely vegetated examples may be encompassed in the definitions.

Table 2 Vegetation

Polygon No	Vegetation	EEC
1	Height 12-14 m, cover 80%. Tuckeroo <i>Cupaniopsis anacardioides</i> , Brown Bolly Gum <i>Litsea australis</i> , Beach Acronychia <i>Acronychia imperforata</i> , Coast Banksia.	Littoral rainforest
2	Height 4-8 m, cover 80%. Coast Ti-tree, Tree Broom-heath	
3	Coast Banksia, Swamp Turpentine, Duboisia <i>Duboisia myoporoides</i> as isolated sparse emergents to 10 m tall over dense Coast Ti-tree, Tuckeroo, Beach Acronychia, Tree Broom-heath.	
4	Height 10 m Tuckeroo, Coast Banksia.	Littoral rainforest
5	Coast Banksia (very large individual), other rainforest species.	Littoral rainforest
6	Dense Coast Ti-tree to 5 m in height, with some mature Tuckeroo in northern section.	
7	Coast Cypress Pine. Includes littoral rainforest species – Coast Banksia and a thicket of Muttonwood <i>Rapanea variabilis</i> suckers.	Coast Cypress Pine Forest
8	Low Tree Broom-heath and Paperbark	
9	Clearing. Some overhanging trees.	
10	Height = 14 m, dense. Swamp Turpentine	
11	Low littoral rainforest, some under powerline. Tuckeroo, Beach Acronychia, Brown Bolly Gum, Coast Banksia	Littoral rainforest

4.3 Flora species of conservation significance

Thirty-two species of Threatened flora have been recorded in the vicinity of the site (Table 3).

Table 3 Threatened flora

Scientific name	Common name	Status EPBC Act	Status TSC Act
<i>Acronychia littoralis</i>	Scented Acronychia	E	E
<i>Allocasuarina defungens</i>	Dwarf Heath Casuarina	E	E
<i>Archidendron hendersonii</i>	White Laceflower		V
<i>Chamaesyce psammogeton</i>	Sand Spurge		E
<i>Cryptocarya foetida</i>	Stinking Cryptocarya	V	V
<i>Davidsonia jerseyana</i>	Davidsons Plum	E	E
<i>Davidsonia johnsonii</i>	Smooth Davidsonia	E	E
<i>Desmodium acanthocladum</i>	Thorny Pea	V	V
<i>Diuris</i> sp. aff. <i>chrysantha</i>	Byron Diuris		E
<i>Drynaria rigidula</i>	Basket Fern		E
<i>Elaeocarpus williamsianus</i>	Hairy Quandong	E	E
<i>Endiandra floydii</i>	Crystal Creek Walnut	E	E
<i>Endiandra hayesii</i>	Rusty Rose Walnut	V	V
<i>Endiandra muelleri</i> subsp. <i>bracteata</i>	Green-leaved Rusty Rose Walnut		E
<i>Floydia praealta</i>	Ball Nut	V	V
<i>Geodorum densiflorum</i>	Pink Nodding Orchid		E
<i>Grevillea hilliana</i>	Yiel Yiel		E
<i>Macadamia tetraphylla</i>	Rough-shelled Bushnut	V	V
<i>Marsdenia longiloba</i>	Slender Marsdenia	V	E
<i>Melicope vitiflora</i>	Coast Euodia		E
<i>Niemeyera whitei</i> [<i>Amorphospermum whitei</i>]	Rusty Plum		V
<i>Oberonia complanata</i>	Yellow-flowered King of the Fairies		E
<i>Owenia cepiodora</i>	Onion Cedar	V	V
<i>Peristeranthus hillii</i>	Brown Fairy-chain Orchid		V
<i>Phaius australis</i>	Southern Swamp Orchid	E	E
<i>Phaius tancarvilleae</i>	Lady Tankerville's Swamp Orchid	E	E
<i>Pterostylis nigricans</i>	Dark Greenhood		V
<i>Randia moorei</i>	Spiny Gardenia	E	E
<i>Syzygium hodgkinsoniae</i>	Red Lilly Pilly	V	V
<i>Syzygium moorei</i>	Coolamon	V	V
<i>Tinospora tinoporoides</i>	Arrow-head Vine	V	V
<i>Xylosma terra-reginae</i>	Queensland Xylosma		E

No specimen of threatened flora species was detected at the site, nor rare species (Briggs and Leigh 1996).

5

Fauna

5.1 Results of inspections

Vertebrates

Fifteen common vertebrate species were recorded overall during site visits, comprising the:

- Dark-flecked Garden Sunskink *Lampropholis delicata*
- Australian Brush-turkey *Alectura lathami*
- Spotted Dove *Streptopelia chinensis*
- Rainbow Lorikeet *Trichoglossus haematodus*
- White-browed Scrubwren *Sericornis frontalis*
- Brown Thornbill *Acanthiza pusilla*
- Lewin's Honeyeater *Meliphaga lewinii*
- Noisy Miner *Manorina melanocephala*
- Brown Honeyeater *Lichmera indistincta*
- Eastern Whipbird *Psophodes olivaceus*
- Spangled Drongo *Dicrurus bracteatus*
- Willie-wagtail *Rhipidura leucophrys*
- Torresian Crow *Corvus orru*
- Magpie-lark *Grallina cyanoleuca*
- Eastern Yellow Robin *Eopsaltria australis*

Invertebrates

Numerous invertebrate species were observed but no attempt was made to identify these apart from conspicuous butterflies that included the Blue Triangle *Graphium sarpedon* and Orchard Butterfly *Papilio aegus*.

Habitats

Habitats within Lot 438 and adjacent road reserve were difficult to characterise due to past and continuing disturbance. Vegetation has been mapped in **the subject site** as a series of polygons according to floristic composition and structure (**Section 4**). This vegetation was dominated in places by Tuckeroo, Brown Bolly Gum, Beach Acronychia and Coast Banksia, which all provide important food resources for nectarivorous, frugivorous and insectivorous vertebrate species.

A substantial litter layer was accumulating and the Paperbark swamp sclerophyll forest adjoining the north-western portion of the Lot and road reserve provided habitat for a number of significant vertebrate species.

The swamp sclerophyll forest also combines with the vegetation in Lot 438 and the road reserve to form part of an east-west wildlife corridor, principally through the northern section of the Lot and road reserve (as demonstrated in Fig. 3.1, Byron Shire Council 2010). Although interrupted by Bangalow Road, the corridor provides a habitat link for more mobile fauna species from the area of the Cumbebin Swamp Nature Reserve to the north-west with vegetation communities to the east that in turn link to Arakwal National Park.

5.2 Fauna species of conservation significance

Several Threatened fauna species (as listed under the *TSC Act*) are considered likely to use the habitats present in Lot 438 and adjacent road reserve, although they do not represent core habitat for any Threatened species.

No Threatened invertebrate species are expected to occur in the Lot and adjacent road reserve at present due to the lack of suitable habitat. However, there are records of some species such as Mitchell's Rainforest Snail *Thersites mitchellae* and the Giant Dragonfly *Petalura gigantea* in other habitats in the general vicinity of the site and the developing littoral rainforest may become suitable for Mitchell's Rainforest Snail in future. This is most likely to occur adjacent to the Paperbark swamp sclerophyll forest where it borders the north-western portion of the Lot and adjacent road reserve.

The Wallum Froglet *Crinia tinnula* may move into the more elevated habitat of Lot 438 at times of flooding of the low-lying swamp sclerophyll forest to the north west and similarly, the Common Planigale *Planigale maculata* may also use the Lot as a flood refuge. Records of the Common Planigale are known from Paperbark swamp sclerophyll forest 400m to the west of Lot 438 (Baker and Miller 1998).

The Koala *Phascolarctos cinereus* is expected to use the swamp sclerophyll forest adjacent to Lot 438 as a movement corridor on occasions as the canopy contains mature trees of Swamp Mahogany *Eucalyptus robusta*, a recognised Koala food tree (Schedule 2, SEPP 44). Individual Koalas may venture into Lot 438 for shelter at these times, although no recognised Koala food trees occur within the Lot itself. Byron Shire Council's (2004) identification of much of the subject site as Koala habitat, as reported in Byron Shire Council (2010), may have been due to the coarseness of mapping that included the **subject site's** vegetation with the larger adjacent Paperbark polygon to the west. Paperbark is recognized as tertiary Koala habitat by Byron Shire Council (2004).

Emergent Coast Banksias *Banksia integrifolia* in the Lot provide a food source for the nectarivorous Eastern Blossom-bat *Syconycteris australis* and Grey-headed Flying-fox *Pteropus poliocephalus* and both these species may forage in the banksias on occasions. However, the Eastern Blossom-bat is wary of the noise and lighting associated with residential development and its presence is considered less likely. Individuals of the insectivorous Eastern Long-eared Bat *Nyctophilus bifax* may forage through the understorey in the Lot from time to time as this species is expected to occur in the adjoining swamp sclerophyll forest.

A systematic vertebrate survey undertaken by the Byron Environmental and Conservation Organisation (1986) close to Lot 438 in 1985 (on the site now occupied by Byron High School) in habitats similar to some in Lot 438 did not record any Threatened fauna species, but several vertebrates considered as "conservation-priority" species (NSW National Parks and Wildlife Service 1995) were detected. These included the Northern Banjo Frog *Limnodynastes terraereginae* and Grassland Melomys *Melomys burtoni* and also nomadic and migratory species such as the Rainbow Bee-eater *Merops ornatus*, Scarlet Honeyeater *Myzomela sanguinolenta* and Little Friarbird *Philemon citreogularis*.

Some of these conservation-priority and migratory species may use habitats in the Lot on occasions and together with the potential occurrence of the Threatened species described above, indicate that Lot 438 contains habitats that are likely to contribute to the conservation of a number of significant vertebrate species.

6 Impacts of proposal

Adverse impacts of a future dwelling and associated infrastructure on ecological values (vegetation, vertebrate fauna species and their habitats) have been reduced to approach the minimum possible by proposing the positioning of the dwelling envelope in the southern section of the Lot adjacent to the existing access track to Lot 320 (**Figure 2**). This will:

- minimise fragmentation of the Lot
- result in the least disturbance to the corridor function of the Lot (as the main habitat linkage is through its northern section) and enable restoration of that part of the corridor within Lot 438 and the Council road reserve
- avoid relocation of the access road (and thus reduce vegetation clearing)
- remove dwelling impacts as far as possible from the important swamp sclerophyll forest to the north west that provides known and potential habitat for several Threatened fauna species.

Nevertheless, the location of a dwelling envelope in this position will result in the loss and modification of approximately 2,900 m² of predominantly native vegetation, based on current understanding of requirements for bushfire hazard reduction management (the dwelling envelope depicted in **Figure 2**). The envelope includes a small area of littoral rainforest (Polygon 1 of area 520 m²), a small area of Coast Cypress Pine Forest (south end of Polygon 7) and two emergent Coast Banksias. The proposal would thus require the removal of some foraging and shelter resources for the Threatened and conservation-priority fauna species described above.

The impact of bushfire hazard reduction management will be minimized through careful prioritization where tree removal is required. Environmental weed removal techniques (especially removal of Cadaghi and Coast Ti-tree) will be employed to partially achieve hazard reduction.

The proposal will result in greater human population density and consequent potential for increased levels of direct and indirect impacts on the environment e.g. traffic movement, domestic animals, rubbish dumping, planting of environmental weeds. Conversely, permanent residential presence may reduce

casual human intrusion and resultant ecological damage at this site with its proximity to Bangalow Road and sportsground.

5 Mitigation and compensation

It is proposed that losses to vegetation and habitats be partly compensated for by habitat restoration in the northern section of the site, replacing plant species important to sensitive vertebrates (such as Coast Banksias) and improving the functioning of the wildlife corridor. In addition, bush regeneration techniques are proposed to improve the condition of other native vegetation, including EECs. Garden plants and other exotic species will be removed, including along the access track to Lot 320 and in the road reserve to the west. The Corporation will be provided with a list of invasive flora species for which planting will be prohibited.

To further reduce potential impacts, it is recommended that a “no dogs and cats” clause be included in the conditions of approval of any future successful Development Application for Lot 438, particularly due to the likelihood of occurrence of the Threatened Common Planigale, which is particularly susceptible to predation from domestic cats.

6 Future statutory assessments

At the development application stage for the proposed dwelling, Section 5A (EP and A Act 1979) assessments will be required and are likely to produce findings as follows:

Test of Significance for Threatened Biota (as listed on Schedules of TSC Act 1995)

No Threatened flora species but several Threatened fauna species (Mitchell's Rainforest Snail, Wallum Froglet, Common Planigale, Koala, Eastern Blossom-bat, Grey-headed Flying Fox and Eastern Long-eared Bat) and two EECs (Littoral Rainforest and Cypress Pine Forest) will require assessment.

Direct and indirect impacts will accrue to small areas of EECs. Impacts will partially be offset by proposed compensatory restoration measures.

Due to the Lot's relatively small size, currently disturbed condition and the existing adverse effects from the dwelling, sports ground and road bordering its south-western, southern and eastern boundaries respectively, the construction and use of a dwelling in the Lot is unlikely to have a significant effect on Threatened, conservation-priority and migratory vertebrate species and their habitats. Compensatory restoration measures proposed will further reduce impacts.

SEPP 44 Koala habitat assessment

Koala food trees (Schedule 2 SEPP 44) are not present. The Lot will not be assessed as Potential Koala Habitat and no Koala Plan of Management will be required.

References

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APPENDIX B

Bushfire Assessment

BUSHFIRE HAZARD ASSESSMENT

FOR

CONSTRUCTION OF NEW DWELLING

AT

LOT 438 - DP 729107
CROWN PARCEL, BANGALOW ROAD
BYRON BAY NSW 2481

FOR

BUNDJALUNG OF BYRON BAY
ABORIGINAL CORPORATION

18 February 2011
Version A

Prepared by:

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PREFACE

Readers of this report must be aware that the bushfire mitigation recommendations described in this report will not completely remove the risk of bushfire impacting the development site. Recommendations contained herein are designed to improve the bushfire related issues for the existing development. With regard to the application the implementation of recommendations in their entirety, together with the diligent maintenance of Asset Protection Zones, will provide for a reduction of the bushfire threat and the associated risk.

This report caters specifically for the requirements of this project and the Client. No warranty is intended or implied, or responsibility undertaken by Barry Eadie Consulting Pty Ltd for its use on any other project or by any third party.

This report does not include an environmental assessment, Aboriginal heritage assessment or identify endangered species in the area.

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1 INTRODUCTION

1.1 Report Purpose

This report assesses the bushfire implications for the construction of a new dwelling at Lot 438 DP 729107, Bangalow Road, Byron Bay. The report will form part of the supporting documentation for a Planning Proposal to permit a dwelling on the site. This Bushfire Hazard Assessment has been undertaken to determine the necessary requirements for the development in accordance with:

- NSW Rural Fire Service, Planning NSW, '*Planning for Bushfire Protection*' (2006); and
- AS 3959-2009: *Construction of Buildings in Bush Fire Prone Areas*.

Barry Eadie Consulting Pty Ltd has been engaged by Balanced Systems to prepare the Bushfire Hazard Assessment report, to be used in support of the Development Application.

2 BUSHFIRE LEGISLATION IN NSW

The *Environmental Planning and Assessment Act 1979* and the *Rural Fires Act 1997* were amended recently via the *Rural Fires and Environmental Assessment Legislation Amendment Act 2002*.

The amendments to the legislation are not retrospective and consequently will not usually apply to development applications which were made, but not necessarily finally determined, before 1 August 2002.

With regard to the *Environmental Planning and Assessment Act 1979*, the amendments:

- a) Require local government councils to record on maps land identified by the Commissioner of the NSW Rural Fire Service as bushfire prone land; and
- b) Prevent development consent being granted for the carrying out of development for certain purposes on bushfire prone land unless the consent authority is satisfied that the development conforms to certain documented bushfire protection specifications and requirements (*'Planning for Bushfire Protection' (2006)* and *AS 3959 – Construction of Buildings in Bushfire-Prone Areas*) or has consulted with the Commissioner;

'Planning for Bushfire Protection' (2006), defines bushfire prone areas as an area that can support a bushfire or is likely to be subject to bushfire attack. In general, a bushfire prone area is an area containing a high, medium or low bushfire hazard, or any area within 100 m of a high or medium bushfire hazard, or within 30 m of a low bushfire hazard. Bushfire hazard areas do not include existing urban areas or water bodies (other than wetland vegetation), and are identified by bushfire hazard mapping produced under an approved Bushfire Risk Management Plan, or other such map certified by the Commissioner of the NSW Rural Fire Service for this purpose.

3 SITE ASSESSMENT

NAME: BUNDJALUNG OF BYRON BAY ABORIGINAL CORPORATION

ADDRESS: c/- PO Box 36
Bangalow NSW 2479

SITE ADDRESS: Lot 438 DP 729107
Bangalow Road,
Byron Bay, NSW 2481

COUNCIL: Byron Shire Council

TYPE of AREA: Residential

TYPE of DEVELOPMENT: 79BA, Construction of new dwelling.

Barry Eadie conducted an inspection of the site at Lot 438 DP 729107, Bangalow Road, Byron Bay and the surrounding area on 11 November 2011. The following assessment has been undertaken in accordance with the requirements of *'Planning for Bushfire Protection' (2006)*. The proposal is for the construction of a new dwelling on the subject Lot.

3.1 Location

The site is located to the North of Red Devil football ground on Bangalow Road, Byron Bay. The subject site is accessed directly from Bangalow Road. There is an existing residential dwelling to the West, roads to the South and East and bushland to the North.

3.2 Vegetation

The vegetation has been assessed over a distance of 140 m from the existing bush vegetation both on and off site in all directions in accordance with Table A2.1 of *'Planning for Bushfire Protection' (2006)*.

To the North is Forested Wetlands, which is classified as Forest in terms of AS 3959-2009.

The site fronts onto Bangalow Road with a narrow (<30 metres in width) of vegetation between the site and the road to the South and East; due to the narrow strip this vegetation would be classified as Rainforest.

There is an existing dwelling to the West and Forested Wetlands to the Northwest, which is a continuation of the vegetation to the North.



View North



View South



View East



View West

3.3 Slope

Based on the site inspection, the slope of the land over a distance of 100 m from the indicative building lines in all directions has been assessed. In accordance with '**Planning for Bushfire Protection**' (2006), the slope has been assessed based on the gradient that will most significantly influence the fire behaviour of the site.

The subject site is generally flat in keeping with the Forested Wetlands vegetation.

3.4 Asset Protection Zone

The Asset Protection Zone (APZ) acts as a buffer zone between the development and the hazard. The primary purpose of an APZ is to ensure that a progressive reduction of bushfire fuels occurs between the bushfire hazard and any habitable structures.

As the strip of vegetation is less than 50 metres directly towards the proposed dwelling the required Asset Protection for rainforest which is Flat under Table 2.4.3 of AS 3959-2009 is 9 metres to the South and East. The minimum APZ to the North and Northwest for Forest on flat ground under Table 2.4.3 of AS 3959-2009 is 21 metres.

3.5 Level of Construction

Table A2.4.3 of Australian Standard AS 3959-2009 *Construction of Buildings in Bushfire-Prone Areas* requires a construction standard of BAL 29 on flat ground as follows.

Development Aspect	Hazard / Vegetation within 140m of Development	Predominant Vegetation Class (Fig A2.2 and Table A2.1)	Average Slope of Land	Proposed Width of Asset Protection Zone (IPA + OPA)	Level of Bushfire Attack (Table 2.4.3)
North	Forest	Forest	Flat	21m	BAL 29
North West	Forest	Forest	Flat	21m	BAL 29
South	Rainforest	Rainforest	Flat	10m	BAL 29
East	Rainforest	Rainforest	Flat	10m	BAL 29
West	Existing dwelling	Forest >40m	Flat	40m	BAL 29

3.6 Fire Fighting Personnel Access

3.6.1 Public Road Access

Access is provided to the Site via sealed public roads, Bangalow Road and Broken Head Road are both capable of supporting fully loaded fire fighting vehicles.

3.6.2 Property Access

Property Access is from both Bangalow Road and Broken Head Road no additional access will be required.

3.7 Electricity Supply

It is preferable that transmission lines providing power to the proposed development should be installed underground.

3.8 Gas

Reticulated or bottled gas shall be installed and maintained in accordance with AS/NZS 1596-2002: ***Storage and Handling of LP Gas*** and the requirements of the relevant authorities. If gas cylinders are to be kept close to buildings, the release valve must be directed away from the building and away from any hazardous materials such as firewood, so that it does not act as a catalyst to combustion.

3.9 Water Supply

As there is Town reticulated water supply available in both Bangalow Road and Broken Head Road a supplementary form of water supply will not be necessary for fire fighting purposes.

4 RECOMMENDATIONS

Based on Barry Eadies' site inspection and assessment, the following recommendations would be required for proposed development of dwelling:

- (a) The Inner Protection Areas as nominated in section 3.5 of this report be managed in accordance with ***'Planning for Bushfire Protection' (2006)*** as Inner Protection Areas:
- (b) The proposed dwelling to be constructed to BAL 29 in accordance with AS 3959-2009 and section A3.7 of Addendum Appendix 3 of ***'Planning for Bushfire Protection' (2006)***.
- (c) If any trees are to be located within the envisaged APZs, this is considered acceptable, providing the following conditions are met:
 - (i) Vegetation is not to touch or overhang dwellings (canopy vegetation must not be within 5 metres of any building / dwelling);
 - (ii) Vegetation is not species that retain dead material or deposit excessive quantities of ground fuel in a short period or in a danger period; and
 - (iii) Vegetation is located far enough away from dwellings so that it will not ignite the dwelling by direct flame contact or radiant heat emission.
- (d) Woodpiles, combustible material storage sheds, large areas / quantities of garden mulch and stacked flammable building materials should not be located within IPA of dwellings;
- (e) Reticulated or bottled gas shall be installed and maintained in accordance with AS/NZS 1596-2002: ***Storage and Handling of LP Gas*** and the requirements of the relevant authorities.

5 CONCLUSIONS

Barry Eadie has conducted a site inspection and assessment of the site. The assessment has been undertaken in accordance with ***‘Planning for Bushfire Protection’ (2006)*** and AS 3959-2009: ***Construction of Buildings in Bush Fire Prone Areas.***

Provided the recommendations stated above are implemented in full, Barry Eadie Consulting Pty Ltd is of the opinion that the proposed development will increase the level of protection from bush fire and achieves the intent of the relevant legislation and in particular the requirements as set out in ***‘Planning for Bush Fire Protection’ (2006).***

6 REPORT BASIS INFORMATION

The report is based on the following:

- (i) Site inspections carried out on 11 November 2011 by Barry Eadie;
- (ii) Site Plan

7 REFERENCES

- NSW Rural Fire Service, Planning NSW, ***‘Planning for Bushfire Protection’ (2006).***
- AS 3959-2009: ***Construction of Buildings in Bush Fire Prone Areas.***

APPENDIX A – PROPOSED DEVELOPMENT PLAN