



## Office of Environment & Heritage

Our Ref: DOC15/294206  
Your Ref: email dated 3 August 2015

Mr Michael Coulter  
General Manager  
Nambucca Shire Council  
PO Box 177  
Macksville NSW Postcode

Attention: Mr Daniel Walsh

Dear Mr Coulter

### **Re: Staged Residential Subdivision, Marshall Way, Bellwood**

Thank you for your email dated 3 August 2015 regarding the proposed residential subdivision at Marshall Way, Bellwood, requesting comments from the Office of Environment and Heritage (OEH). I appreciate the opportunity to provide input. I apologise for the delay in providing a response.

The OEH has statutory responsibilities relating to biodiversity (including threatened species, populations, ecological communities, or their habitats), Aboriginal and historic heritage, National Parks and Wildlife Service estate, flooding and estuary management. Matters relating to noise, air and water quality and any licensing requirements under the *Protection of the Environment Operations Act 1997* should be addressed separately to the Environment Protection Authority because that authority is now independent of us.

We have reviewed the documents supplied and advise that, although we have no concerns about NPWS estate, estuaries and flooding or historic heritage, a number of issues are apparent with respect to the assessments for biodiversity, and Aboriginal cultural heritage. These issues are discussed in detail in **Attachment 1** to this letter. In summary, the OEH recommends:

- a) The soil type underlying swamp forest vegetation be determined following a field-based assessment of the soils present. The information collected in the field can then be used to determine the presence or absence of EEC within the subject site.
- b) If EEC is confirmed to exist on site, the OEH's first preference would be for efforts to be made to avoid impacts on all EEC vegetation. An alternative to avoiding EEC would be the lodgement of an application for a Biobanking Statement.
- c) Regardless of the conservation status of the vegetation on the subject site, all vegetation proposed to be removed will need to be offset (refer to comments on offsetting that are provided in later sections of this assessment).

- d) Council require the applicant to permanently protect the area currently referred to as 'the deferred area' to maximise the likelihood for the persistence of the local population of the yellow-bellied glider. To this end, OEH suggests the use of an appropriate mechanism to protect and manage this area, such as a Biobanking Agreement.
- e) Depending on their anticipated future use, Council consider pursuing a Biobanking Agreement (or a similar mechanism) for the area of land known as Lot 23 in DP 790194 (zoned RE1 Public Recreation) and the road reserve described as Lot 359 DP 755550 (partially zoned R1 – General Residential and RU2 – Rural Landscape) to ensure their long term protection and management to maximise the likelihood for the persistence of the existing local population of the yellow-bellied glider.
- f) That the layout of the proposed subdivision be redesigned to relocate the APZ wholly onto the subject site.
- g) The required southern APZ be located outside of yellow-bellied glider habitat, given the known significance of this vegetation to this threatened species.
- h) That the redesigned layout of the proposed subdivision incorporate perimeter roads as part of any required APZs.
- i) The subdivision be redesigned to exclude APZs from 'the deferred area'.
- j) The subdivision be redesigned to ensure adequate provision of any required APZs along the northern subject site given the future intended vegetated state of the Faringdon Fields. The appropriate location of the APZ over the northern parts of the subject site can only be determined once the recommended additional field work has been undertaken to determine the presence of swamp sclerophyll forest on floodplain EEC, and an appropriate management/design response determined.
- k) That council require the applicant to exclude all infrastructure from within 'the deferred area', given the value of this area to yellow-bellied glider, including but not limited to roads, street lighting, pipelines, and any other infrastructure associated with the proposed subdivision.
- l) The council require, as a condition of consent, the proponent to prepare a comprehensive Environmental Management Plan (EMP), should the proposal be approved. Minimum EMP inclusions are listed in Attachment 1 of this submission.
- m) That the biodiversity loss be quantified using a best-practice bio-metric to determine an appropriate offset. The OEH considers that the BioBanking Credit Calculator is the most appropriate tool for this purpose.
- n) An appropriate offset site should be determined in accordance with the OEH's 13 principles for offsetting which can be found at the following web address  
<http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm>
- o) The offset site must be protected and managed in-perpetuity and secured with an appropriate mechanism, such as a BioBanking Agreement. The inclusion of 'the deferred area' as a Biobank Agreement site is likely to partially fulfil the offset requirements determined by the Credit Calculator.
- p) The area is known to have significance to the local Aboriginal community. However, no evidence of Aboriginal consultation for the subject land is apparent in the dated, broader area, Aboriginal cultural heritage assessment provided to support the proposal.

If you have any further questions about this issue, Ms Nicky owner, Conservation Planning Officer, Regional Operations, OEH, can be contacted on 6659 8254 or at [nicky.owner@environment.nsw.gov.au](mailto:nicky.owner@environment.nsw.gov.au).

Yours sincerely



21/9/2015

**ROSALIE NEVE**  
**A/Senior Team Leader Planning, North East Region**  
**Regional Operations**

Contact officer: NICKY OWNER  
6659 8254

Enclosure: Attachment 1



## Attachment 1: Detailed OEH Comments – Residential Subdivision Marshall Way

### 1) Background

The proposed development is a 132 residential subdivision at Lot 1 DP 1119830, Marshall Way, Bellwood. This will result in the loss of about 12.5ha of vegetation on site, with approximately 1.5ha of vegetation to be retained within a deferred lot in the eastern part of the subject site.

### 2) Biodiversity

#### Endangered Ecological Community

According to the Statutory Ecological Assessment (the EA) prepared by Naturecall Environmental and dated April 2015, a patch of swamp forest occurs in the northwest of the site. According to the EA however, this forest community did not qualify as an EEC due to the absence of underlying alluvial soils in this area. It appears that the determination of underlying soil type was based on examination of mapping contained in the Soil Landscapes of the Macksville-Nambucca 1:100,000 sheet - map and report, rather than any field-based assessment of the soil types present.

OEH recommendation:

- a) OEH's experience in similar cases indicates that soil or geology mapping sources are not always accurate, especially in complex depositional coastal environments. As such the OEH recommends that the underlying soil type be determined following a field-based assessment of the soils present. The information collected in the field can then be used to determine the presence or absence of EEC within the subject site.
- b) If EEC is confirmed to exist on site, the OEH's first preference would be for efforts to be made to avoid impacts on all EEC vegetation. An alternative to avoiding EEC would be the lodgement of an application for a Biobanking Statement.
- c) Regardless of the conservation status of the vegetation on the subject site, all vegetation proposed to be removed will need to be offset (refer to comments on offsetting that are provided in later sections of this assessment).

#### Yellow-bellied Glider

The proposed subdivision will require removal of approximately 12.5ha of vegetation, including three hollow-bearing trees, one yellow-bellied glider sap tree from the site and other foraging resources.

According to the EA, almost all of the site's hollow-bearing trees and active yellow-bellied glider sap trees are contained within a forested area which is located over the eastern parts of the subject site (henceforth described as 'the deferred area'). With respect to this area, the SEE states *'an area of land that has frontage to Spring Street, has been deferred from residential subdivision pending further investigation into the yellow bellied glider that is accessing sap trees in this location. The sap trees are to be preserved and only the road connection as an extension to Spring Street constructed through this area'*.

The EA also explains that the road reserve that runs to the south and parallel to the subject site (partially zoned R1 – General Residential and RU2 – Rural Landscape), contains a known den site for the yellow-bellied glider and provides an important movement corridor between the subject site and forests to the south, as well as to Nambucca State Forest to the west.

The OEH notes that there is an additional parcel of land which lies between the subject site and the aforementioned road reserve and which is zoned RE1 – Public Recreation. Based on a site inspection conducted by the OEH's Conservation Planning Officer Ms Nicky Owner on 15 September 2015, a number of habitat resources for the yellow-bellied glider also exist in this area.



Given the identified importance of 'the deferred area' to yellow-bellied gliders, combined with the proposed removal of 12.5 hectares of habitat known to be utilised by this species, OEH considers that there is significant justification for this remnant of habitat to be protected and managed in perpetuity. Without permanently securing this remnant, there is a real risk for the local population of yellow-bellied gliders to become extinct.

OEH recommendation:

- d) Council require the applicant to permanently protect the area currently referred to as 'the deferred area' to maximise the likelihood for the persistence of the local population of the yellow-bellied glider. To this end, OEH suggests the use of an appropriate mechanism to protect and manage this area, such as a Biobanking Agreement.

Further detail on Biobanking Agreements can be found at [www.environment.nsw.gov.au/biobanking/](http://www.environment.nsw.gov.au/biobanking/)

Furthermore, given the known high value yellow-bellied glider breeding and foraging habitat that exists within the public recreation zone and road reserve which run adjacent to the subject site to the south, as well as the role this vegetation plays in connecting the vegetation of 'the deferred area' and the broader subject site to the adjoining yellow-bellied habitat in proximate areas to the south and west, the OEH encourages council to also consider protecting and managing this vegetation (including the undertaking of assisted regeneration works within degraded sections of these areas) for the yellow-bellied glider.

OEH recommendation:

- e) Depending on the anticipated future use of these areas, Council consider pursuing a Biobanking Agreement (or a similar mechanism) for the area of land known as Lot 23 in DP 790194 (zoned RE1 Public Recreation) and the road reserve described as Lot 359 DP 755550 (partially zoned R1 – General Residential and RU2 – Rural Landscape) to ensure its long term protection and management and to maximise the likelihood for the persistence of the existing local population of the yellow-bellied glider.

It is noted on the subdivision plan dated May 2015, and included within the Bushfire Risk Management Plan (BRMP) for the proposed subdivision, that the Asset Protection Zone (APZ) required along the southern boundary of the subject site is located over vegetation which is known to contain important yellow-bellied glider habitat. Given the value of this area to the yellow-bellied glider, and the need for the removal of a number of habitat trees and critical understorey and groundcover elements required to create the APZ, the location of the APZ within this vegetation is not supported.

Additionally, it is also noted that this APZ is proposed to be located on an adjacent landholding, rather than within the subject site. The placement of this APZ on the adjacent land at this location is not supported - all APZs should be located wholly within the development property.

It is also OEH's preference that the subdivision design incorporate perimeter roads as part of any required APZs.

OEH recommendation:

- f) That the layout of the proposed subdivision be redesigned to relocate the APZ wholly onto the subject site.
- g) The required southern APZ be located outside of yellow-bellied glider habitat, given the known significance of this vegetation to this threatened species.
- h) That the redesigned layout of the proposed subdivision incorporate perimeter roads as part of any required APZs.

To this end, it is also noted on the subdivision plan contained in the BRMP that APZs are located within 'the deferred area'. As stated previously, given the value of this area to the yellow-bellied glider, the removal of a number of habitat trees and critical understorey and groundcover elements as part of creating the APZ is inconsistent with the retention of this area to ensure the persistence of the yellow-bellied glider.

OEH recommendation:

- i) The subdivision be redesigned to exclude APZs from 'the deferred area'.

Additionally, given council's resolution made on 26 February 2015 for the Faringdon Playing Fields, which border the subject site to the north, will be reclassified as operational land with the intention of transferring it to Aboriginal ownership. Furthermore, the resolution also requires the preparation of a Master Plan for the re-establishment of the fields as a natural area. As such, given the intended likely future forested state of the fields, an APZ must be provided along the northern boundary of the subject site, and again, it must be located wholly within the proposed subdivision area landholding.

OEH recommendation:

- j) The subdivision be redesigned to ensure adequate provision of any required APZs along the northern subject site given the future intended vegetated state of the Faringdon Fields. The appropriate location of the APZ over the northern parts of the subject site can only be determined once the recommended additional field work has been undertaken to determine the presence of swamp sclerophyll forest on floodplain EEC, and an appropriate management/design response determined.

The OEH also notes that proposed subdivision includes an extension to Spring Street. It is further noted that this extension is proposed to bisect 'the deferred area'. The Spring Street extension through the proposed 'deferred area' is not supported.

OEH recommendation:

- k) That council require the applicant to exclude all infrastructure, as well as any additional works associated with the subdivision, from within 'the deferred area', given the value of this area to yellow-bellied glider, including but not limited to roads, street lighting, pipelines, and any other infrastructure associated with the proposed subdivision.

#### Other Biodiversity Values

In addition to the yellow-bellied glider, a number of additional threatened fauna species have been recorded in the study area by various fauna surveyors. The species previously recorded within the subject site include the little lorikeet, grey-headed flying fox, little bent-wing bat, eastern false pipistrelle, east-coast freetail bat, green-thighed frog, brown tree creeper, varied sittella, glossy-black cockatoo, and osprey and several more were considered potential occurrences based on the habitats occurring in the study area and presence of local/regional records in similar habitats.

The impacts of the removal of biodiversity, including known and potential threatened species habitat will need to be mitigated and offset, as described below.

#### Mitigation of Impacts

An essential component for managing the direct and indirect impacts of works associated with the proposed subdivision is the preparation of an Environmental Management Plan (EMP), including a plan to manage native vegetation.

OEH recommendation:



- l) The council require, as a condition of consent, the proponent to prepare a comprehensive Environmental Management Plan (EMP), should the proposal be approved. The EMP must include the following components, as a minimum
- i. An erosion and sediment control plan, including:
    - Installation of erosion and sediment control measures prior to construction.
    - Regular inspection of erosion and sediment control measures, particularly following rainfall events, to ensure their ongoing functionality.
    - Restriction of stockpiles to identified construction compounds, in areas of cleared land and exotic grassland and management of these stockpiles to ensure no offsite impacts through dust generation or sedimentation.
    - Areas of bare ground to be stabilised as soon as practicable after construction to minimise the time bare earth is exposed to erosion and weed invasion.
  - ii. A vegetation management plan, including:
    - Delineation and protection of native vegetation to be retained on site (ie avoided).
    - Communication with construction personnel of the conservation value of surrounding habitats and their responsibilities with regards to protection these habitats during construction.
    - Hygiene procedures to prevent the introduction and spread of pathogens such as Phytophthora and Myrtle Rust in areas of native vegetation. These would include exclusion zones around retained areas of native vegetation and/or provision of machine and footwear wash-down stations for all equipment and personnel working in areas of native vegetation.
  - iii. A weed management plan, including a description of:
    - Type and location of weeds of concern (including noxious weeds) within the subject site.
    - Sensitive receivers (such as native vegetation, drainage lines and waterways) within or adjacent to the subject site.
    - Measures to prevent the spread of weeds, including hygiene procedures for equipment, footwear and clothing.
    - Proposed weed control methods and targeted areas.
    - Weed disposal protocols.
  - iv. A fauna management plan, including, but not limited to the following:
    - A fauna management protocol, including pre-clearing surveys for nesting or roosting terrestrial fauna.
    - A habitat feature protocol, including pre-clearing surveys for habitat features such as hollow logs and hollow-bearing trees that can be retained or salvaged and placed in adjoining retained vegetation, and protocols for the safe clearing of hollow-bearing trees to ensure no resident fauna are injured.
    - Protocols to prevent introduction or spread of chytrid fungus in accordance with the OEH's hygiene protocol for the control of disease in frogs.
    - Careful removal and relocation of hollow resources cleared from the subject site into proximate areas.
    - Careful removal of all termitaria (which have been observed on site), given their potential use by fauna, including gliders, possums and/or microchiropteran bats.
  - v. A pre-clearing protocol which should include, but not be limited to:
    - Clear marking/erection of exclusion fencing around protected vegetation areas and delineation of 'no go' areas.
    - Inspections of native vegetation for other resident fauna and/or nests or other signs of fauna occupancy.
    - Capture and relocation or captive rearing of less mobile fauna (such as roosting microbats, nestling birds or any injured fauna) by a trained and experienced wildlife handler and with assistance from WIRES (or similar).



- Inspection and identification/marketing of hollow-bearing trees adjacent to construction footprints to help ensure against accidental impacts.
- Pre-clearing surveys are to be undertaken by suitably qualified and experienced ecologists.

### Offsetting Requirements

Where native vegetation will be removed, including known and potential threatened species habitat, an appropriate biodiversity offset will be required. This applies to all anticipated losses of native vegetation, regardless of the conservation value of the vegetation to be affected. All biodiversity losses must be appropriately offset.

OEH recommendation:

- m) That the biodiversity loss be quantified using a best-practice bio-metric to determine an appropriate offset. OEH considers that the BioBanking Credit Calculator is the most appropriate tool for this purpose.
- n) An appropriate offset site should be determined in accordance with the OEH's 13 principles for offsetting which can be found at the following web address  
<http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm>
- o) The offset site must be protected and managed in-perpetuity and secured with an appropriate mechanism, such as a BioBanking Agreement. The inclusion of 'the deferred area' as a Biobank Agreement site is likely to partially fulfil the offset requirements determined by the Credit Calculator.

### 3) Aboriginal Cultural Heritage

The OEH has undertaken a comprehensive review of the Aboriginal cultural heritage issues that relate to the subject DA and the locality in which the subdivision proposal is situated. The site is known to have significance to the local Aboriginal community. This is evidenced within the historical submission made on behalf of the men of the Nambucca Heads Local Aboriginal Land Council (NHLALC) and the Gumbaynggirr Nation in relation to a broader subdivision proposal and its associated Aboriginal cultural heritage assessment. This submission states the subject site, and its adjacent areas, are *"the focal point of cultural belief on (sic) the entire Gumbaynggirr Nation"*.

It appears that the Aboriginal cultural heritage assessment referenced in the supporting documentation provided to OEH was carried out in 2002. The 2009 revised report, prepared by Appleton, was based on the results of the initial 2002 survey work. However, based on the description of the areas surveyed (pages 2 and 6, of the Appleton report dated 2009) and Figures 2 & 3 of that report, it appears that the land to which the 2002 assessment relates does not form part of the current proposal. Furthermore review of the evidence of consultation, as outlined in the 2009 report, clearly indicates that the area under assessment for that project was Lot 2 DP 1119830 which is land to the north of the current proposal area. This is consistent with the advice provided by NHLALC in their submission.

Although based on this information, it appears that the 2009 Aboriginal cultural heritage report does not refer to lands included in the current proposal. There are inconsistencies with the text, other figures in the report and the information provided by the only member of the Aboriginal community involved in the earlier 2002 survey process.

It is of concern that the information provided in the submission made on behalf of the men of the NHLALC and the Gumbaynggirr Nation indicates that no members of the Aboriginal community have been involved in any Aboriginal cultural heritage survey of the current proposal area and only partially involved in the survey of the adjacent lands in 2002.

It is therefore unclear from the information provided, whether the proposal area has ever been subject to a stand-alone archaeological and cultural assessment. What is clear from the report is that no assessment has been conducted on, or adjacent to, the subject lands since 2002 apart from a specific visit in 2008 to view the remains of a scar tree which is not situated on the proposed subdivision area.

Furthermore OEH notes that no consultation with the local Aboriginal community has occurred, with regard to the Aboriginal cultural heritage assessment, for a number of years.

OEH recommendation:

- p) Based on the known significance of the locality to the Aboriginal community and the apparent lack of Aboriginal cultural heritage assessment previously undertaken over the subject site, a comprehensive Aboriginal cultural heritage assessment be carried out to inform the determination process for the current subdivision proposal. This should include both an archaeological and intangible cultural assessment which must be conducted in accordance with the relevant legislation and associated guidelines.

In addressing these requirements, the applicant is encouraged to refer to the following documents:

- Due Diligence Code of Practice for the Protection of Aboriginal Objects in NSW (OEH, 2010) - <http://www.environment.nsw.gov.au/resources/cultureheritage/ddcop/10798ddcop.pdf>. These guidelines identify the factors to be considered in Aboriginal cultural heritage assessments for proposals.
- Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (OEH, 2010) - <http://www.environment.nsw.gov.au/licences/consultation.htm>. This document further explains the consultation requirements that are set out in clause 80C of the National Parks and Wildlife Regulation 2009. The process set out in this document must be followed and documented in the EA.
- Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (OEH, 2010) - <http://www.environment.nsw.gov.au/licences/archinvestigations.htm>.





## Office of Environment & Heritage

Our Ref: DOC16/313140

Your Ref: DA2015/099

General Manager  
Nambucca Shire Council  
PO Box 177  
Macksville NSW 2447

Attention: Mr Daniel Walsh

Dear Mr Coulter

### **Re: Additional Information – Proposed Subdivision, Marshall Way, Bellwood**

Thank you for the Nambucca Shire Council's email dated 21 June 2016 seeking comments from the Office of Environment and Heritage (OEH) on the additional information provided for the proposed subdivision at Marshall Way, Bellwood. I appreciate the opportunity to provide further input.

The OEH has reviewed this additional information in light of the issues we raised in our letter to the council on this matter dated 21 September 2015 (attached). Our review indicates that those issues have not been satisfactorily addressed.

Amongst other matters, our previous letter provided recommendations to gather additional biodiversity information, or obtain a BioBanking Statement, or redesign the subdivision, to reduce impacts on biodiversity to levels that would avoid significant effects on threatened species, populations, ecological communities, or their habitats, pursuant to section 5A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and to provide a detailed Aboriginal cultural heritage assessment. The additional information has largely ignored our previous advice.

With respect to the Swamp Sclerophyll Forest endangered ecological community (EEC), the flora and fauna study states on page 27, *'the swamp forest vegetation on site would floristically qualify as this EEC, however it does not occur on alluvial soils hence cannot qualify as this EEC'*. The study relies on 1:25000 scale soil landscape mapping, which it states on page 26 is of *'limited accuracy'*, to discount the presence of this EEC.

The OEH recommended in our previous letter that field testing of the soil in the EEC was required to confirm this conclusion due to the unreliability of soil landscape mapping at this scale. The additional information has not provided any results of field testing and without this information, the consent authority should assume that the EEC is present. It appears that the proposal will remove almost all of the EEC patch that forms the local occurrence and hence, under section 5A of the EP&A Act it is likely the proposal will have a significant effect on the EEC.



This potentially significant effect could be avoided if the proponent provides soils information that confirms the EEC is not present, or if the proponent obtains a BioBanking Statement for this impact, or if the proposal is redesigned to avoid and/or greatly reduce impacts on the EEC. Redesign would require the retention of this vegetation with a suitable vegetated buffer, which excludes subdivision infrastructure and bushfire asset protection zones, bounded by a perimeter road to allotments, as per our previous letter.

With respect to the yellow-bellied glider, key habitat resources for this threatened species are located in the road reserve to the south of the subject land and in the deferred area in the south-east. Den trees and active sap trees of this species are particularly critical habitat components and the flora and fauna study noted a previous recommendation that, *'a 50m buffer be established around the identified den tree and retention of the patch of intact open forest in the southeast of the site which contained a number of active sap trees used by the Yellow-bellied Glider'*.

The current proposal retains most of the vegetation in the south-east but ignores this constraint by including a road through this vegetation, some clearing for bushfire asset protection in this part of the site, and management of native vegetation in the road reserve to the south for bushfire asset protection zones (APZs), including around the known den tree. A den tree buffer is not provided. The flora and fauna study did not assess any impacts of clearing for APZs in the road reserve. It confined the assessment to clearing for residential lots and internal access roads (page 66).

The additional information supports the clearing in the road reserve for APZs by indicating that canopy connectivity will be retained for the yellow-bellied glider along the road reserve and that there are many records of this threatened species in the State Forest to the west. However, it does not provide an assessment of significance for this additional clearing.

The OEH does not support this analysis. Clearing of nearly all vegetation to the north and west of the known den tree for the subdivision, subsequent urban development in that area, likely impacts on the road reserve from unauthorised uses arising from allotments directly backing onto the road reserve, and vegetation clearing in the road reserve for APZs that is likely to restrict future recruitment of canopy trees and thereby reduce habitat connectivity, may cause the known den tree and the active sap trees to be abandoned by the yellow-bellied glider.

There is no information provided on the number of available den trees or sap trees in the home range of the yellow-bellied glider family group that inhabits the subject land, or the number of yellow-bellied glider family groups that make up the local population of this threatened species, or their home ranges. Hence, it could be determined that under section 5A of the EP&A Act it is likely the proposal will have a significant effect on the yellow-bellied glider.

This potentially significant effect could be avoided if the proponent obtains a BioBanking Statement for these impacts, or undertakes additional field surveys to better characterise the local yellow-bellied glider population (number of family groups, available den trees, home ranges and sap tree foraging resources) and re-applies the assessment of significance, or redesigns the subdivision to provide a perimeter road around all lots on the southern boundary, exclude all vegetation clearing for APZs from the road reserve to the south, relocate the proposed road connection to Spring Street to the north so that it is on existing cleared land and avoids passing through areas of regenerating forest vegetation, and secure the in-perpetuity retention and protection of the vegetation in the deferred area, as we recommended in our previous letter.

If the issues regarding the Swamp Sclerophyll Forest endangered ecological community and the yellow-bellied glider are not resolved as per our advice above, the council should seek independent expert advice regarding the need for a species impact statement to be prepared for the proposal before it can be determined.



With respect to biodiversity offsets, we advise that despite there not being any statutory requirement for such, the OEH recommends that all remaining biodiversity impacts for this proposal should be offset. To assist proponents and consent authorities, the OEH has developed 13 principles for the use of biodiversity offsets in NSW. These are intended to be used for proposals other than those for major projects (i.e. other than for state significant development or state significant infrastructure). The principles are available at <http://www.environment.nsw.gov.au/biodivoffsets/oehoffsetprincip.htm>.

With respect to Aboriginal cultural heritage (ACH), our previous letter made a number of comments on the ACH assessment for the proposal. We noted that the subject lands did not appear to have ever been surveyed or assessed for ACH values. Despite the two figures in the 2009 Appleton report (Figures 1 and 5) suggesting the site subject to the current DA was surveyed, the report consistently refers to Lot 2, DP 1119830. We further note that during the consultation process for the 2002 survey all letters and notifications to the Aboriginal community referred only to Lot 2, DP 1119830. The OEH notes that the lands currently being assessed do not include or even border on, Lot 2 DP 1119830 so the council should seek clarification and supporting evidence to show that the subject lands have been subject to archaeological survey and consultation.

The OEH further notes that the report, dated December 2009, actually refers to survey and analysis which was conducted in 2002. In general, reports greater than five years old cannot be accepted without corroborating recent data for planning decisions. This is due to a number of factors, primarily the fact that natural and anthropogenic taphonomic processes (land disturbances) that significantly alter the visual archaeological signature are likely to have occurred over longer periods of time. The OEH notes a number of major flood and weather events since 2002 that are almost certain to have resulted in significant variation in the visible archaeology of the subject lands. Furthermore the OEH notes that in the 2009 report refers to the surface conditions in 2002 when the fieldwork was conducted as "so dense in *many* places that it was only possible to perform a sample survey."

The OEH advises that, even in the event that evidence is provided that the subject lands were surveyed in 2002, the survey was conducted 14 years ago under conditions which precluded the identification of any Aboriginal sites or objects which may be present. Furthermore, given the size of the area purportedly covered in 2002, the OEH considers that archaeological survey carried out in one day over an area as large as that could not have constituted a comprehensive and effective archaeological assessment.

Furthermore, the OEH notes the existence of at least one report, prepared by the local Aboriginal community and submitted directly to the council to inform the determination process. This report identified very significant cultural heritage values directly associated with the subject lands. We also note that that report clearly stated that no opportunity to carry out any ACH survey on the subject lands had been provided, nor consultation with, any member of the Nambucca Heads Aboriginal community to date.

The additional information provides a single paragraph response to the ACH concerns we raised, stating that no ACH values exist within the subject lands and that significant consultation with 'local Aboriginal representatives' has taken place. No evidence to support this response has been provided.

Based on the aforementioned points the OEH considers that an updated Aboriginal cultural heritage assessment report (ACHAR) should be prepared to inform the proposal. The updated ACHAR should be informed by, and include the results of, a new survey of the subject lands to ensure confidence and adequacy in the assessment process and consultation with Aboriginal knowledge holders. That report should be submitted to the OEH for review prior to the council determining the development application.

With respect to the remaining recommendations in our previous letter, those on subdivision design in the north adjacent to Faringdon Fields and affecting the deferred area in the south-east, and on the preparation of an Environmental Management Plan, should also be addressed.



The OEH strongly recommends that the council resolves the issues we have raised above before determining the development application. To this end, the OEH requests a meeting with the council, the proponent and its consultants to further discuss these issues with a view to providing better clarification and understanding so that they can be resolved.

If you have any further questions about this issue, Ms Nicky Owner, Conservation Planning Officer, Regional Operations, OEH, can be contacted on 6659 8254 or at [nicky.owner@environment.nsw.gov.au](mailto:nicky.owner@environment.nsw.gov.au).

Yours sincerely

 11 July 2016

**DIMITRI YOUNG**  
**Senior Team Leader Planning, North East Region**  
**Regional Operations**

Contact officer: NICKY OWNER  
6659 8254





## Office of Environment & Heritage

Our Ref: DOC16/513355  
Your Ref: email dated 11/10/2016

General Manager  
Nambucca Shire Council  
PO Box 177  
Nambucca Heads NSW 2447

Attention: Mr Daniel Walsh

Dear Mr Coulter

**Re: Additional Information – Proposed Subdivision, Marshall Way, Bellwood.**

Thank you for your email dated 11 October 2016 about the proposed residential subdivision at Marshall Way, Bellwood seeking comments from the Office of Environment and Heritage (OEH) on additional information provided by the applicant. I appreciate the opportunity to provide further input.

We have reviewed the additional information supplied and can advise that most of the outstanding biodiversity and Aboriginal cultural heritage issues raised in our previous correspondence relating to the proposed subdivision remain unresolved. There appears to have been very little change to the proposal or the information provided in its support. The OEH does not support this proposal in its current form.

The additional information confirms that an endangered ecological community (EEC) does exist on the subject land. Hence, the proposal is likely to have greater impacts on biodiversity values than previously stated, particularly on threatened species and EECs as described in our previous correspondence. These issues are discussed in detail in **Attachment 1** to this letter.

In summary, the OEH recommends that the council resolves the following issues before determining the development application:


1. A Species Impact Statement (SIS) should be prepared by the applicant or the subdivision redesigned to avoid direct and indirect impacts on all EEC vegetation. An alternative to avoiding the EEC and preparing a SIS would be obtaining a BioBanking Statement for these biodiversity impacts.
2. The discrepancies in the ecological assessment should be resolved and the ecological assessment should also be revised in light of the soil assessment results, which confirmed the presence of alluvial soils on the subject land.

3. The potential for future development of the Deferred Area should not be used as a reason to dismiss its value as a biodiversity offset to compensate for the impacts of the current proposal. The Deferred Area should be secured in-perpetuity as an offset for impacts on the yellow-bellied glider.
4. The proposal should be redesigned as per the recommendations in our letters dated 21 September 2015 and 11 July 2016. Alternatively, if the proponent wishes to retain the current subdivision design, then the following information needs to be provided to adequately assess the impacts on the yellow-bellied glider, or a BioBanking Statement obtained for those impacts:
  - a. determine the number of yellow-bellied glider family groups that make up the local population
  - b. identify the proportion of the family group territory being removed and the extent to which this would create conflicts between displaced individuals and individuals in neighbouring territories;
  - c. identify the location and density of alternative feeding and denning resources remaining in the territory of the affected yellow-bellied glider social group; and
  - d. assess the potential impact of the proposal on the viability of the local yellow-bellied glider population.
5. An updated Aboriginal cultural heritage assessment report should be prepared for the proposal. The updated report should be informed by, and include, the results of a new archaeological survey of the land subject to this subdivision proposal and consultation with Aboriginal knowledge holders.

Our letter of 11 July 2016 requested a meeting with the council, the proponent and their consultants about the issues we had raised with the proposal. This meeting did not occur. The OEH again requests a meeting with the council, the proponent and their consultants to clarify these matters and identify the next steps to progress the proposal.

If you have any further questions about this issue, Mr Don Owner, Regional Operations Officer, Regional Operations, OEH, can be contacted on 6659 8233 or at [don.owner@environment.nsw.gov.au](mailto:don.owner@environment.nsw.gov.au).

Yours sincerely

 4 November 2016

**DIMITRI YOUNG**  
**Senior Team Leader Planning, North East Region**  
**Regional Operations**

Contact officer: DON OWNER  
 6659 8233

Enclosure: Attachment 1: Detailed OEH Comments – Proposed Subdivision, Marshall Way, Bellwood

cc: Northern Joint Regional Planning Panel



## Attachment 1: Detailed OEH Comments - Proposed Subdivision, Marshall Way, Bellwood

### 1. Biodiversity

#### Assessment of Endangered Ecological Communities

##### *Idyll Spaces Assessment*

The site-specific soil assessment requested by the OEH and undertaken by Regional Geotechnical Solutions in 2016 identified the presence of alluvial soils on the subject land. Subsequent additional flora survey undertaken by Idyll Spaces (2016) confirmed the occurrence of swamp sclerophyll forest on coastal floodplains of the NSW North Coast bioregion Endangered Ecological Community (SSF EEC) on the subject land.

Idyll Spaces (2016) estimated that 0.34 ha of SSF EEC would be removed by the proposed subdivision from a total estimated area of SSF EEC of 0.60 ha. The assessment of significance (AoS) prepared by Idyll Spaces (2016) under section 5A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) concluded that the proposal would be unlikely to have a significant effect on threatened ecological communities. However, Idyll Spaces failed to address Part C of the AoS, which is provided below:

*(c) in the case of an endangered ecological community or critically endangered ecological community, whether the action proposed:*

*(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or*

*(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction*

Consequently, the Idyll Spaces impact assessment for EECs failed to identify the extent of the local occurrence of the SSF EEC or the proportion of the local occurrence potentially impacted by the proposed subdivision.

Section 5A(1)(b) of the EP&A Act requires that the OEH's Threatened Species Assessment (TSA) Guidelines must be taken into account in underrating the AoS. The "local occurrence" of an ecological community is defined in the TSA guidelines as "the ecological community occurring within the study area, plus adjacent areas if the ecological community on the study area forms part of a larger contiguous area of that ecological community and the movement of individuals and exchange of genetic material across the boundary of the study area can be clearly demonstrated". Based on this definition it would appear that the local occurrence of the SSF EEC encompasses an area of 0.60 ha, of which the proposed subdivision would directly remove approximately 56.7% (i.e. 0.34 ha). Furthermore, the small remnant of SSF EEC (0.26 ha) retained in the study area would be subject to increased exposure to a variety of edge effects associated with an intensification of land use such as residential development.

"Risk of extinction" is defined in the TSA guidelines as "the likelihood that the local occurrence of the ecological community will become extinct either in the short-term or in the long-term as a result of direct or indirect impacts on the ecological community, and includes changes to ecological function". Based on this definition the OEH considers there to be a high risk of the SSF EEC local occurrence becoming locally extinct as a result of the proposed subdivision.

Therefore, based on the local occurrence definition and analysis of potential impacts described above, the OEH does not support the conclusion drawn by Idyll Spaces (2016). The OEH considers the proposed subdivision as likely to cause the local occurrence of the SSF EEC to become extinct, an outcome that should be considered as having a significant impact on SSF EEC and therefore requiring a Species Impact Statement to be prepared.



*OEH Recommendation:*

1. Either a Species Impact Statement (SIS) should be prepared by the applicant or the subdivision redesigned to avoid direct and indirect impacts on all EEC vegetation. An alternative to avoiding EEC and the need to prepare a SIS would be obtaining a BioBanking Statement for the biodiversity impacts of the proposal.

*Revised Ecological Assessment*

There remain inconsistencies within the revised ecological assessment prepared by Naturecall (2015 or 2016 depending on whether you refer to the cover page or the document status register) with respect to whether the floristic composition of Community 4 is consistent with the Scientific Determination for SSF EEC. It is stated in Table 1 that Community 4 *“does not meet the floristic criteria specified in the Scientific Determination”*, which contradicts a statement made in Table 2 that *“the swamp forest vegetation on site (presumably Community 4) would floristically qualify as SSF EEC”*.

*OEH Recommendation:*

2. The discrepancies in the ecological assessment should be resolved and the ecological assessment should also be revised in light of the soil assessment results, which confirmed the presence of alluvial soils on the subject land.

Inconsistent Statements Regarding the Deferred Lot

It was stated in a letter from Geoff Smyth & Associates to Nambucca Shire Council dated 3 February 2016 that *“the deferred area is an area for further investigation and not an exclusion area. The land can be subdivided with minimal impacts on the yellow-bellied glider. The further investigation aims to determine an acceptable subdivision layout and other design parameters that might be appropriate”*. This statement clearly demonstrates the applicant’s intention to intensify land use in the deferred area in the form of future residential subdivision.

Despite this statement, it is stated in Section 6.1.1. of the revised ecological assessment that *“the development will require the removal of most of the previously disturbed vegetation on the site aside from the open forest in the deferred Lots in the southeast”*. This statement implies that the habitat resources within the Deferred Lot(s) would be retained, hence not directly affected by the proposal, which is misleading given the future intentions of the applicant as stated in the Geoff Smyth & Associates correspondence.

*OEH Recommendation:*

3. The potential for future development of the Deferred Area should not be used as a reason to dismiss its value as a biodiversity offset to compensate for the impacts of the current proposal. The Deferred Area should be secured in-perpetuity as an offset for impacts on the yellow-bellied glider.

Revised Impact Assessment on Yellow-bellied Glider

According to the published scientific literature, a social group of yellow-bellied gliders generally relies on fewer than 10 sap-feed trees and fewer than five den trees within their territory. Such low numbers are not considered to be an indication of how unimportant such habitat resources are to the species, but rather a reflection of how rare such resources usually are within a territory. It is therefore very important that direct and indirect impacts on the sap trees, den trees and hollow-bearing trees in the deferred area and the road reserve are avoided. The proposal will remove one sap tree and the proposed road and APZs in the Deferred Area have the potential to cause decline in sap trees within and adjacent to such infrastructure due to direct impacts from roadworks and indirect impacts via loss of recruitment potential.

It is claimed in the Geoff Smyth & Associates correspondence to the council (3 February 2016) that the applicant has responded to the OEH concerns based on the known site values verified from detailed field investigation. This is incorrect as the applicant has not provided the necessary additional information. In order to accurately assess the potential impacts of losing an entire social group of yellow-bellied gliders on the local population the applicant needs to:

- determine the size and shape of yellow-bellied glider social group territories in the vicinity of the subject land to identify the proportion of the social group territory being removed and the extent to which the proposal would create conflicts between displaced individuals and individuals in neighbouring territories;
- identify the location and density of alternative feeding and denning resources remaining in the territory of the affected yellow-bellied glider social group; and
- assess the potential impact of the proposal on the viability of the local yellow-bellied glider population, which would also require accurate information regarding the total area of contiguous habitat for the species in the locality, overall habitat quality and an accurate estimate of the number of social groups within the local population.

The OEH does not consider the field investigations undertaken for the ecological assessment to be sufficiently detailed to address the information gaps identified above, which are required to undertake well-informed assessment of the significance of impacts on the yellow-bellied glider.

The NSW Rural Fire Service Planning for Bushfire Protection guidelines specify that an Outer Protection Area (OPA) should provide a tree canopy cover of less than 30% and should have understorey managed (mowed) to treat all shrubs and grasses on an annual basis in advance of the fire season (usually September). If effectively implemented, such actions will prevent future recruitment of canopy trees.

Consequently, the long-term viability of foraging and denning habitat and habitat connectivity within the proposed APZs that encroach into areas occupied or utilised by the yellow-bellied glider will effectively be removed over the course of several decades as existing mature trees die off and are not replaced by recruitment trees. The impacts of this long-term loss of known yellow-bellied glider habitat has not been acknowledged or considered in the revised ecological assessment, which has the potential to isolate the key denning and breeding habitat resources located to the east along the road reserve and in the Deferred Area.

However, Mr Daniel Walsh of the council has advised that 12m of the required APZ for lots 92-106 in the south will be located within these lots. This will reduce the incursion of the APZ into the road reserve of Bellwood Road enabling more canopy trees to be retained. Mr Walsh also advised that the council would condition the proposal to require revegetation of the remaining parts of the road reserve to facilitate ongoing recruitment of trees. Whilst not ideal, this change to the subdivision, if implemented, will increase the likelihood that connectivity for the yellow-bellied glider is maintained.

Nevertheless, the OEH does not support the proposed inclusion of bushfire APZs on neighbouring lands, which is contradictory to both OEH and NSW Rural Fire Service guidelines and policies.

*OEH Recommendation:*

4. The proposal should be redesigned as per the recommendations in our letters dated 21 September 2015 and 11 July 2016. Alternatively, if the proponent wishes to retain the current subdivision design, then the following information needs to be provided to adequately assess the impacts on the yellow-bellied glider, or a BioBanking Statement obtained for those impacts:
  - a. determine the number of yellow-bellied glider family groups that make up the local population



- b. identify the proportion of the family group territory being removed and the extent to which this would create conflicts between displaced individuals and individuals in neighbouring territories;
- c. identify the location and density of alternative feeding and denning resources remaining in the territory of the affected yellow-bellied glider social group; and
- d. assess the potential impact of the proposal on the viability of the local yellow-bellied glider population.

## **2. Aboriginal Cultural Heritage (ACH)**

The Appleton report is internally inconsistent. The description of the project site in section 1.2 (page 2) and the map at Figure 1 and Figure 5 both include the land subject to this subdivision proposal at Marshall Way. However, Section 1.2 (page 6) of the Appleton report clearly states that the subject lands for his study comprise Lot 2, DP 1119830. This is not the land subject to this subdivision proposal at Marshall Way.

The OEH noted the question raised by Len Roberts in the additional information provided as to whether this inconsistency is the result of rezoning. To address this question, the OEH reviewed historical cadastral data for 2009. Our review has determined that the current zoning reflects that of 2009 such that the current property descriptions for Lots 1 and 2 are the same as those that would have been referenced in the Appleton report.

The OEH notes that the evidence provided in the Appleton report, supporting the claim that consultation with the Aboriginal community was conducted as part of the 2009 review of the 2002 report, does not refer to the land subject to this subdivision proposal. We note that the lands subject to the current subdivision proposal comprise Lot 1 DP1119830 which is not mentioned in any of the letters of correspondence or associated documents included as appendices to the Appleton report. Nor is Lot 1 mentioned at any place in that report apart from its inclusion in some, but not all of the figures therein.

Hence the OEH is unable to determine from the information provided whether any Aboriginal cultural heritage assessment has been carried out over the land subject to this subdivision proposal.

The OEH notes that if the evidence against the subject lands having been subject to archaeological and Aboriginal cultural assessment were disregarded and the assertions that the area was subject to assessment were considered valid, the result would be that in 2002 a cursory assessment of a small portion of Lot 1 was carried out. The OEH does not consider that the area covered by the text line in figure 5 of the Appleton report is sufficient to categorise the archaeological signature of Lot 1.

Furthermore, the OEH considers that archaeological assessments more than five years old are generally not current. Therefore, assessments carried out 14 years ago cannot be considered representative of the current archaeological signature of an area. We note in support of this argument that in the period between 2002 and the present, significant clearing of vegetation has occurred across the subject lands. This is likely to have significantly enhanced visibility for the purposes of archaeological survey. Consequently, the taphonomic results of the clearing are likely to have significantly altered the directly visible archaeological signature of the subject lands.

Based on the above the OEH considers that our position with regard to Aboriginal cultural heritage values for the subject lands remains the same and we consider that our previous advice remains current with regard to the Aboriginal cultural heritage assessment component of this proposal.