



Office of
Environment
& Heritage

Our Ref: DOC18/735660
Your Ref: PP 26.2017.4.1



General Manager
Byron Shire Council
PO Box 219
Mullumbimby NSW 2482

Dear Mr Arnold

Re: Planning Proposal to amend Byron LEP 2014 – Lot 22 Stuart Street, Mullumbimby

Thank you for your letter dated 26 September 2018 about the planning proposal by Byron Shire Council to amend Byron Local Environmental Plan 2014 – Rezone & Reclassify Lot 22 DP 1073165 Mullumbimby, seeking advice from the Office of Environment and Heritage (OEH). I appreciate the opportunity to provide input.

The planning proposal seeks to rezone approximately 22 hectares of the existing RE1 Public Recreation zone to R1 General Residential. This will be a new zone not previously used in the Byron Local Environmental Plan (LEP) 2014. The balance of Lot 22 DP 1073165 will remain in its current RE1 Public Recreation zone and partly as a Deferred Matter under Byron LEP 1988.

We have reviewed the documents supplied and advise that, although we have no issues to raise about NPWS estate or historic heritage, several issues are apparent with the assessments for flooding, coast and estuary, biodiversity and Aboriginal cultural heritage. These issues are discussed in detail in **Attachment 1** to this letter.

In summary, the OEH recommends that prior to finalising the planning proposal, the Byron Shire Council should:

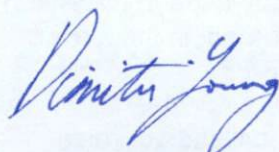
1. Further consider and justify the potential presence of Endangered Ecological Communities in the planning area to inform the planning proposal.
2. Ensure that areas containing EECs are not subject to zones that intensify land uses and are instead zoned E2 (Environmental Conservation).
3. Provide more information and make a clearer commitment as part of the planning proposal to undertake the proposed rehabilitation works in the ecologically sensitive parts of the planning area. The work could occur under the Plan of Management for the community land, given that these areas will retain this classification, with this plan updated to append a Vegetation

Management Plan or Biodiversity Management Plan prepared for these areas and this should form part of the commitment.

4. Consider providing a constraints map which identifies rehabilitation areas and other constraints such as flooding, the tributary of Saltwater Creek, and wetlands and appropriate buffers, to provide an indication of the possible development footprint and better inform the application of zones through the planning proposal.
5. Provide further detail and commitment to review the zonings of the land at a time when environmental protection zones can be applied.
6. Undertake further flood modelling for additional design flood events.
7. Address all the principles of the Floodplain Development Manual 2005, including public safety and access implications.
8. Consider the broader catchment issues and how this site relates to the preparation of the North Byron Floodplain Risk Management Study and Plan.
9. Consider amending the planning proposal to align the boundary of the rezoning no less than 40m from Saltwater Creek.
10. Require further investigation of Aboriginal cultural heritage at the development application stage.

If you have any further questions about this issue, Mr Krister Waern, Senior Operations Officer, Conservation and Regional Delivery, OEH, can be contacted on 6640 2503 or at krister.waern@environment.nsw.gov.au.

Yours sincerely

 26 October 2018

DIMITRI YOUNG
Senior Team Leader Planning, North East Branch
Conservation and Regional Delivery

Contact officer: KRISTER WAERN
6640 2503

Enclosure: Attachment 1: Detailed OEH comments - Planning Proposal to amend Byron LEP 2014 – Lot 22 Stuart Street, Mullumbimby

Attachment 1: Detailed OEH Comments – Planning Proposal to amend Byron LEP 2014 – Lot 22 Stuart Street, Mullumbimby

Biodiversity comments

The Office of Environment and Heritage (OEH) has reviewed the Ecological Assessment dated July 2017, and the further habitat assessment dated April 2018 prepared by Mark Fitzgerald. We acknowledge that the site is currently in a degraded state.

Section 5.3 of the Ecological Assessment states that there are two possible Endangered Ecological Communities (EEC) on site, being the Freshwater Wetland and Subtropical Coastal Floodplain Forest. Considering the Broad-leaved Paperbark present on site, the Swamp Sclerophyll Forest EEC should also have been considered as potentially occurring on site, perhaps more so than the Subtropical Coastal Floodplain Forest.

For the coastal floodplain EECs there is no specified condition threshold where a degraded EEC is no longer considered to be an EEC. The EECs on the property appear to have been dismissed from occurring on the site, however many of the attributes of the EECs are marked as present in Tables 3 and 4 of the Ecological Assessment. The Ecological Assessment conclusion that no EECs exist on the property has been reflected in the Planning Proposal report dated September 2018. There does not appear to be enough analysis regarding the presence or absence of EECs on the property.

If EECs are found to be present, then they would constitute areas of confirmed High Environmental Value as identified in the North Coast Regional Plan. Such areas should not be subject to zonings that intensify land uses but should instead be protected by applying the E2 (Environmental Conservation) zone.

The OEH agrees with the Ecological Assessment recommendation that a Vegetation Management Plan or Biodiversity Management Plan be prepared for the site. The other recommendations of the Ecological Assessment include the rehabilitation for the southern King's Creek wetland and the eastern wetland on a tributary of Saltwater Creek. The council has not made any direct comments about the recommendations in the Ecological Assessment. We note that council, through the Planning Proposal report, has alluded to undertaking some rehabilitation work however there is limited detail.

In addition to the above proposed rehabilitation works, the council has also identified a 50m agricultural buffer planted with native vegetation for the southern boundary of the property.

We are aware that environmental zones are currently not available in the Byron LGA and as such the areas proposed for conservation will be retained in the current recreation zone. Once the council has the ability to apply environmental zones or biodiversity overlays, the nominated conservation areas should be rezoned to reflect the intent of the conservation areas.

OEH Recommendations

1. Further consider and justify the potential presence of EECs on the property to inform the planning proposal.
2. Ensure that areas containing EECs are not subject to zones that intensify land uses and are instead zoned E2 (Environmental Conservation).
3. Provide more information and make a clearer commitment as part of the planning proposal to undertake the proposed rehabilitation works in the ecologically sensitive parts of the planning area. The work could occur under the Plan of Management for the community land, given that these areas will retain this classification, with this plan updated to append a Vegetation Management Plan or Biodiversity Management Plan prepared for these areas and this should form part of the commitment.

4. Consider providing a constraints map which identifies rehabilitation areas and other constraints such as flooding, the tributary of Saltwater Creek, and wetlands and appropriate buffers, to provide an indication of the possible development footprint and better inform the application of zones through the planning proposal.
5. Provide further detail and commitment to review the zonings of the land at a time when environmental protection zones can be applied.

Flooding comments

A 'high-level' flooding assessment has been undertaken by BMT of conceptual fill footprints to inform the feasibility of the planning proposal. The flood assessment looked at three different Design Options and modelled impacts for the 10% (10-year) and 1% (100-year) flood events. Conclusions of the flood assessment were that limiting fill coverage areas and having drainage reserves across the property results in flood impacts to an acceptable level and a feasible development may be achieved.

Rezoning proposals need to satisfy Section 9.1 Planning Direction 4.3 Flood Prone Land (formerly Section 117). Under the direction a planning proposal must not rezone land within the flood planning areas from 'Recreation' to 'Residential'. A planning proposal may be inconsistent with this direction if the planning proposal is in accordance with a floodplain risk management plan prepared in accordance with the principals of the Floodplain Development Manual 2005.

The flood assessment undertaken does not address all the principles of the Manual. The assessment has not assessed flood events larger than the 100-year ARI and it has not considered public safety. If a flood event larger than the 100-year flood occurred, the residents in the proposed rezoning area would need to have access to a safe flood free area, i.e. a location above the Probable Maximum Flood Level (PMF). All the surrounding roads would likely be flooded and would be unsafe for travel. Note that the 100-year flood level varies across the site from approximately 3.1m AHD to 3.8m AHD and the PMF flood level is 5.6m AHD roughly 2m higher.

Also, the access to the proposed rezoning area has not been finalised. Options include access via Stuart Street, Byron Street and Jubilee Avenue. Depending on the final option, constructing the access could also affect flooding as Stuart St would require a new bridge and the other options would require road construction and if road was raised above surrounding ground level could affect flood behaviour.

The council is also preparing a 'North Byron Floodplain Risk Management Study and Plan' through the NSW Floodplain Management Program. This study and plan includes the Murwillumbah area and is looking at floodplain management in a holistic manner for the catchment. The rezoning proposal should be considered as part of the study and plan so that it can be assessed with the other flood issues and possible mitigation measures. There are possible mitigation measures in the area that could affect flood flows and behaviour through the site and thus these options need to be considered in conjunction with the proposed rezoning.

OEH Recommendations

6. Undertake further flood modelling for additional design flood events.
7. Address all the principles of the Floodplain Development Manual 2005, including public safety and access implications.
8. Consider the broader catchment issues and how this site relates to the preparation of the North Byron Floodplain Risk Management Study and Plan.

Coast and Estuary comments

There are no known current coastal hazards risks to the subject site (tidal inundation or bank erosion). The NCCARF Coast Adapt sea level rise mapping shows no projected sea level rise risk to the majority of the site from tidal inundation under the 2100 high emissions scenario (refer - https://coastadapt.com.au/sea-level-rise-information-all-australian-coastal-councils#NSW_BYRON). There may be some tidal inundation risk at the very southern margin of the site under this scenario at 2100.

It would appear the environmentally sensitive area (not proposed for re-zoning) covers a strip only approximately 25 metres wide along the banks of Saltwater Creek. The *Water Management Act, 2000* has requirements for development within 40m of watercourses to limit associated impacts to riparian zones and watercourses. It is important to facilitate the maintenance of, or improvement of riparian vegetation and to ensure any potential impacts to water quality from future development are minimised as much as possible.

The proposal represents a substantial increase in developable land and may yield a significant increase in development on that land. The Brunswick Estuary is already under significant ecological stress with regular episodes of poor water quality, several moderate to severe bank erosion sites, and is an intensively used estuary for public recreation, also having recreational and commercial fisheries value. It is important to the current and long-term sustainability of the Brunswick Estuary and its various values, that when considering future land-use and future development proposals that appropriate measures are implemented to facilitate improved riparian vegetation condition and extent, minimise additional river bank erosion (via increased hydraulic load or human trampling), and improve stormwater management to minimise storm water impacts on water quality and hydraulic loading in streams and tributaries.

OEH recommendation

9. Consider amending the planning proposal to align the boundary of the rezoning no less than 40m from Saltwater Creek.

Aboriginal Cultural Heritage comments

OEH comments regarding the Aboriginal cultural heritage (ACH) values of the planning area are based on a review of the Cultural Heritage Site Inspection Report from the Tweed Byron Local Aboriginal Land Council (TBLALC) and the letter response from Bundjalung of Byron Bay Aboriginal Corporation (Arakwal) and on an OEH desktop assessment of actual and potential ACH values of the planning area and adjacent lands.

Aboriginal Representatives Engagement and Site Assessment

The OEH notes that the Tweed Byron Local Aboriginal Land Council (TBLALC) was contacted by Phil Warner of council to undertake an assessment of ACH values within the proposed RE1 planning area. After a desktop analysis of available records and consultation with Aboriginal and community knowledge-holders by the TBLALC, two members of the TBLALC and an Arakwal representative undertook an onsite field inspection via foot transection across the planning area. The TBLALC desktop assessment indicates that the local area has a long history of Aboriginal occupation and significance however no additional desktop information was provided regarding the proposed R1 General Residential rezoning area.

The TBLALC site inspection report notes that the site has undergone historical modification and disturbance, is currently being used for cattle grazing and displays evidence of culverts/channels constructed to assist with water drainage. They also suggest that the site is likely to have had a long history of agricultural activity and ongoing impact to ACH values.

The TBLALC ACH assessment report noted poor visibility due to long grass and snakes thus not all areas of Lot 22 DP 1073165 were able to be assessed however it concludes that the entire lot was 'effectively traversed'. The TBLALC Cultural Heritage Site Inspection Report concluded that 'no evidence of Aboriginal cultural activity or material was observed on the day of inspection'.

The response letter from Bundjalung of Byron Bay Aboriginal Corporation (Arakwal) noted that a large bone had been identified, however it may have been a cattle bone as an adjacent large pile had been seen by the TBLALC Sites Officer. They further noted that the grass was too long to see evidence of campsites or artefacts and that objects may be uncovered during the excavation process.

The OEH notes that under the Advice and Recommendations section from the Site Inspection Report, the TBLALC states that 'further site inspections and recommendations in the context of specific plans, which may include on-site monitoring during ground disturbance stages, should be undertaken'. Similarly, the response letter from Bundjalung of Byron Bay Aboriginal Corporation (Arakwal) recommends that 'site monitoring occur on Part Lot 22 DP 1073165 if any development is approved'. We note these recommendations and suggest the details be negotiated with the proponent at the Development Application stage.

OEH Desktop Assessment - AHIMS sites

An OEH desktop assessment indicated that the local area contains a moderate to high density of known AHIMS sites (table 1 and figure 1 below). All but three of the 67 sites within a 10,000m radius are located east of the planning proposal area closer to the coastline with most sites ranging within the search radius of between 3,500 and 10,000m east.

One identified artefact site exists near the planning area (<500m), which identified two artefacts that appear to either comprise an isolated find, or were manuports.

Distance	Number of Objects	Type
0 – 100m	0	Nil
100-500m	1	Artefacts (1) *
500-1000m	0	Nil
1000-2500m	2	Stone Arrangement (1), PAD (1)
2500-5000m	14	Artefacts (4), Artefacts & Shell (4) Earth Mound Hearth (1) Artefacts, Shell Hearth (1) Aboriginal Resource and Gathering (2) Aboriginal Resource and Gathering Shell (1) PAD (1)
5000-10000m	50	Aboriginal Ceremony and Dreaming (1) Artefacts (20), Artefacts, Non-Human Bone and Organic Material (1), Artefacts & PAD (5) Artefacts, Shell (11) Ceremonial Ring (3) Modified Tree (1) PAD (2) Shell (5) Stone Arrangement (1)
TOTAL	67	

Table 1. Distance and distribution of Aboriginal objects in vicinity of the planning proposal area. * denotes an object from the AHIMS data base identified in 1999 that contains no supporting documentation and that may have spatial errors. The object is identified as rock engraving art site however a visual inspection shows a low lying, level and depositional landscape with no visible surface outcrops.

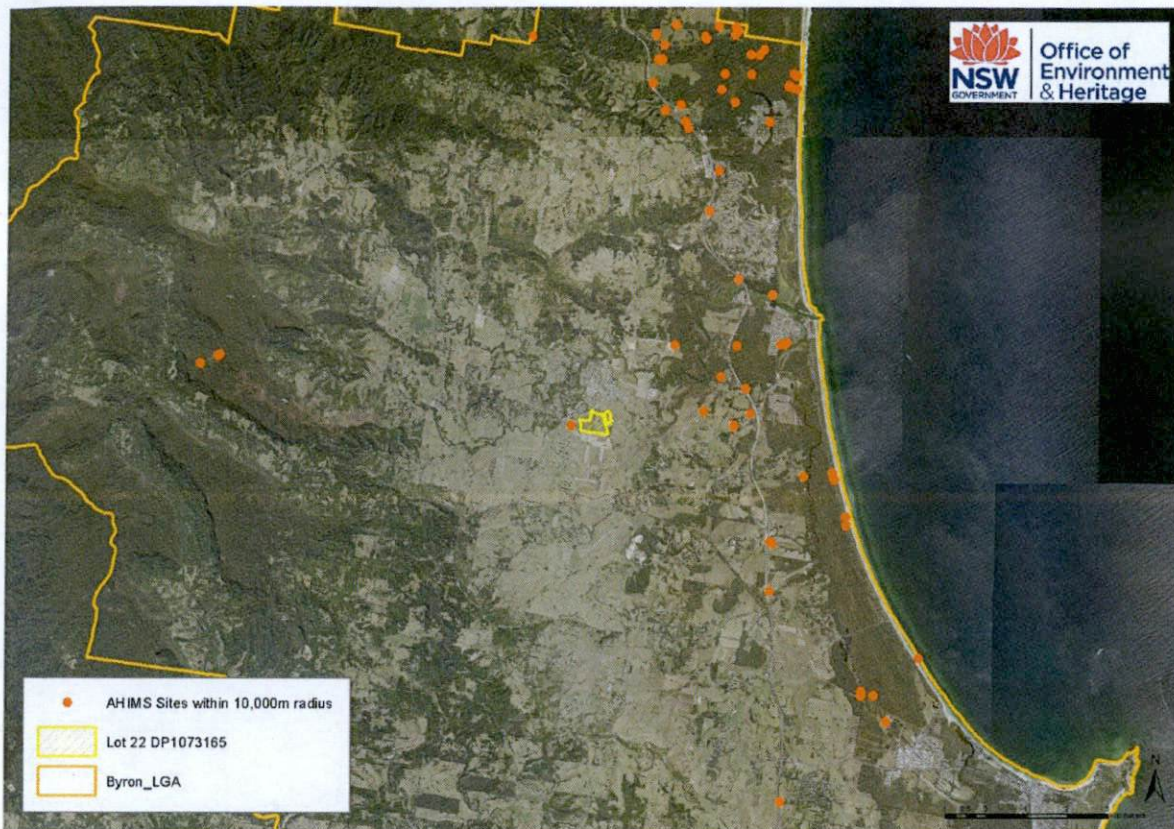


Figure 1. AHIMS sites within 10,000m radius of Lot 22 DP1073165
Cultural Landscapes

The topographic location of the planning area in context of the Aboriginal cultural landscapes has a moderate potential to contain cultural material given that:

- There is anecdotal evidence from several sources noting Mount Chincogan (approximately 2500m directly north) as a gender specific ceremonial site. Views of Mt Chincogan are likely observable from parts of the planning proposal area.
- The property is bordered by the upper portions of Saltwater Creek and to a lesser extent Kings Creek which may be brackish/tidal and may have historically, offered food resources.
- At its closest point, the planning proposal area is around 750m from the Brunswick River which was undoubtedly a major resource provider and may have provided areas for suitable campsites.
- The OEH notes however that given the low elevation and flat topographic position that this area may have also been periodically inundated during flooding or heavy rainfall events and may not have provided favourable ongoing and continuous conditions for campsites. The OEH further acknowledges that the planning proposal area has likely undergone some continual anthropogenic levelling due to agricultural activities.

OEH Recommendation

10. Further investigation of Aboriginal cultural heritage should occur at the development application stage.