



CLARENCE ENVIRONMENT CENTRE Inc

29-31 Skinner Street

South Grafton 2460

Phone/ Fax: 02 6643 1863

Web site: www.cec.org.au

E-mail: admin@cec.org.au

Submission

to

Clarence Valley Council

council@clarence.nsw.gov.au

on

Amended DA (DA 2015/0034)

**Proposed residential subdivision
Lot 99 DP 823635, Hickey Street ILUKA**

Compiled by John Edwards
For the Clarence Environment Centre
Date: 12th December, 2016

Iluka development Submission (Mark 2)

Introduction

The Clarence Environment Centre (CEC) has maintained a shop-front in Grafton for over 27 years, and has a proud history of environmental advocacy. The conservation of Australia's natural environment, both terrestrial and and marine, has always been a priority for our members, and we believe the maintenance of healthy ecosystems and biodiversity is of paramount importance. To that end we are making this submission to express major concerns with the above proposed subdivision.

It should be noted that, as an environment group, the following submission is focused largely on ecological matters relating to the impacts on flora and fauna, but stress that other significant issues related to the fields of engineering; building code & bushfire hazard; traffic assessment; field radiation, storm water management; erosion & sediment control, acid sulphate soil assessment, cultural heritage matters, and other significant social impacts, to those better qualified to comment.

Foreword

Iluka is a small coastal village with about 950 occupied dwellings housing around 1,700 people, and has limited opportunities for employment, with few public facilities. Its isolated location requires residents to undertake a 150km round trip to travel to the nearest regional centre in Grafton, where many residents commute for employment, specialist medical treatment, and the many essential services that only regional centres provide. It is a 60km round trip to the nearest high school or hospital at Maclean, and all of which is hampered by an almost total lack of public transport.

Such enforced travel in an age of dwindling oil supplies, and an urgent need to reduce carbon emissions, is entirely contrary to the NSW Regional Strategies which encourage residential development to occur close to existing centres. With no available land at Iluka to expand to provide industry, or facilities, the proposed 20% increase in population is irresponsible at best, and should be deemed unacceptable.

The village area is completely surrounded by the Clarence River, and National Parks, including renowned World Heritage Littoral Rainforest, the largest of the few remaining remnants in Australia, part of the coastal group of listed [Gondwana Rainforests of Australia](#), inscribed in 1986. The reserve was added to the Australian National Heritage List in 2007, and contains many different plant species ranging from coastal dune to tropical rainforest species, and provides habitat for a wide range of native animal species including threatened Koalas and the endangered Coastal Emu.

It is important to recognise the extremely high level of biodiversity surviving on the Iluka peninsular, with literally thousands of flora and fauna species known to occur, close to 100 of which are now listed as threatened under State and Federal Acts.

Therefore the inclusion of any large residential development at the expense of native vegetation will have significant impacts on the natural environment, as well as the 'sense of place' for this small village population. In the case of Iluka, which is surrounded by extremely high conservation value native forests, much of which has World Heritage status, those impacts are significantly multiplied.

In this instance, not only will there be a direct loss of between 15 and 20 hectares of native vegetation which, according to the DA, supports threatened Koalas and endangered Coastal Emus, the addition of 162 residential blocks will add approximately 400 to 500 residents, a significant 20% increase to the small community, which will include some 320 additional motor vehicles, and many hundreds of dogs and cats that are known to pose a serious threat to native wildlife.

According to the DA, 90 flora and 112 fauna species have been recorded on the subject site, including 13 listed as threatened under the NSW Threatened Species Conservation Act (TSC) and/or the Federal Environment Protection and Biodiversity Conservation Act (EPBC), or otherwise protected under international treaties,

- China-Australia Migratory Bird Agreement.
- Japan-Australia Migratory Bird Agreement.
- Republic of Korea-Australia Migratory Bird Agreement.

It would be impossible to identify all flora and fauna on the site, and in fact independent surveys have raised the total number of flora species on the subject site to over 140. The DA also acknowledges the **high probability** that as many as 17 threatened species could occur on the site.

Summary of matters of concern (specific comments below)

- The proponent has undertaken extensive research in a quest to, at the very least, cast doubt on whether or not the endangered *Acronychia litoralis* occurs on the subject site. They have been unable to locate specimens sent to various herbaria over many years, and now claim there is “*tantalizing evidence to suggest that this specimen may have been collected from the Landcare works area*”, just across the road. In conclusion, we believe in this instance, there is a clear need to consider the “Precautionary Principle” which, put simply, states that scientific uncertainty should not be used as justification to disregard potential threats.
- While the amended DA now acknowledges the occurrence of the Endangered Coastal Cypress Pine community on the site, the consultant has determined that solitary trees, and saplings don't count. Based on that arbitrary decision, the consultant reduced the 10 hectare population identified by residents, who marked the location of each tree by GPS, to a mere ¼ hectare. Their decision ignores the Scientific Committee's determination that numbers of the Pines can be sparse in recovering populations, despite the Office of Environment and Heritage's (OEH) assessment pointing out that very fact in the letter published in the amended DA.
- In this amended DA, there is what appears to be an arrogant display of defiance of OEH's request for further assessment of a number of threatened species that had not been dealt with previously. Those species, including Spotted-tailed Quoll, the migratory Rainbow Bee-eater, Brush-tailed Phascogale, Squirrel Glider, Wompoo Fruit-dove and Superb Fruit-dove, have all been recorded close by, and in fact the DA clearly acknowledges that the Superb Fruit-dove was actually heard calling on the subject site. As well, in our previous submission we provided evidence in the form of NSW Atlas records, that Squirrel Gliders do occupy that forested area, and exposed the sneaky tactics used to hide that fact. However, in terms of OEH's request for further assessment, no such work was done, and the relevant section of the amended DA is presented virtually unchanged from the original.
- The proponents have similarly 'thumbed their noses at OEH's request that: “*The total biodiversity impacts, including the indirect impacts, need to be quantified*”, which has also been ignored. Despite claiming (page 23) that: “*This aspect has been reviewed and assessed in detail in the report Additional Flora and Fauna Impact Assessment dated 31 October 2016 by Keystone Ecological*”, we could find no such assessment of cumulative impacts.
- There is a clear statement in the amended DA that “*There has been no additional information that changes the fundamental approach to koala habitat areas as described in the original Development Application*”. Despite the aims of, “*the state-wide Recovery Plan for the Koala are to ensure that the current extent of Koala habitat is maintained and improved (not reduced) ...*”, the proponent sticks with an old assessment that the Iluka population of Koalas is “functionally extinct”, and continues to ignore more recent sightings of breeding koalas and a report suggesting a small recovery might be under way.
As such, we strongly believe the cumulative impact delivered by this development proposal, will have the potential to deliver the last nail into the coffin of the struggling Iluka Koala population. Therefore our earlier comments remain unchanged (see below)

- Failure to adequately address acknowledged threats to Endangered Coastal Emu population. We find it is bizarre to suggest, as the consultant does (Table 1.1) that Emus are “*unlikely to occur*”, while on the same chart admitting to finding scats. As there has been no material change in the amended DA in respect to the Emu, our original comments stand (see below).
- Failure to acknowledge the loss of a vital east-west wildlife corridor, and the erroneous claims that the subject site is not part of a recognised regional wildlife corridor, and that no corridor linkages will be severed. The proposal to retain narrow vegetated strips along perimeter roads as wildlife corridors would prove disastrous for species like Koala and Emu.
- Failure to properly address the identified impacts of the development on the Iluka World Heritage area, despite the International Union for the Conservation of Nature and Natural Resources highlighting the impacts of urban development on the park. The offer of a 10 metre wide vegetated buffer along Iluka Road is clearly inadequate.
- Despite acknowledging that declining numbers of threatened species is the **direct result of habitat loss**, the DA's claims the loss of between 15 and 20 hectares of bushland habitat, a listed Key Threatening Process, will have no significant impact on any of the 13 threatened species known to occur on the site. This simply cannot be supported. If habitat loss is driving threatened species to extinction, any further loss has to be significant.
- Failure to acknowledge the impacts of key threatening processes on the adjoining national park estate, particularly for bushfire management, i.e. “too frequent fire”, “loss of native vegetation” for hazard reduction, and other “edge effects”.
- The DA freely acknowledges that the development will cause three Key Threatening Processes – Loss of hollow-bearing trees, the loss of fallen timber, and one that impacts all native species, the clearing of native vegetation. Given all of the above, we have grave concerns over the DA's assessment (*Flora and Fauna Impact Assessment (FFIA) Summary*) that the development, “*is considered unlikely to result in a significant adverse impact for any matters of import*”.
- The DA's conclusion that, “*no further assessment is required: neither a Species Impact Statement need be prepared under guidelines issued by the NSW Office of Environment and Heritage, and no referral to the Commonwealth Department of Environment need be pursued*”, **cannot possibly be supported**. We strongly refute Keystone Ecological's claim that there will be no significant impact on any matters of national importance. The requirements of the EPBC Act 2000, are clearly set out in the DA. **Therefore, given the concerns raised in this submission, it is clear a Species Impact Statement has to be prepared, and the DA should be “referred” to the Federal Minister for the Environment for assessment as a Controlled Action, which we strongly believe should lead to the DA being rejected.**
- The remoteness of Iluka, and its lack of essential services (and space to provide them) to cater for a 20% increase in population, makes a large greenfield development inappropriate.
- We believe the proposed retention of a 10m wide vegetated buffer along Iluka Road and Elizabeth Street, will not occur for bushfire safety reasons. Therefore its inclusion as some sort of mitigating factor is misleading, and should be rejected.
- A failure to spell out where hazard reduction zones will be sited, particularly along the eastern boundary with Bundjalung National Park, and impacts that will result (see specific comment below).
- A failure to map the endangered Litoral rainforest, as requested by OEH, and deciding to only protect “*the best quality*” parts of it.

Background

The original DA for the above proposal was placed on public exhibition over the Christmas - New Year period, 2015/16, an act that caused a furore, forcing Council to extend the exhibition period. Subsequently, Council sought further information on a series of matters that had been raised internally, or by government agencies and other submission writers.

The comments made by the OEH, after assessing the original DA for the Hickey Street Development, are significant in two respects. Firstly they highlight the inept nature of Keystone Ecological's Flora and Fauna Impact Assessment (FFIA), and secondly thoroughly supports arguments put forward by objectors.

Some of the more significant comments relating to the consultants' competence are:

- *“the vegetation mapping provided in the FFIA does not enable identification of discrete areas of vegetation”*
- *“the vegetation mapping should provide a clear indication of the parent vegetation type rather than just labelled as “low wattle woodland”, which is the response to disturbance*
- *“the FFIA identifies the presence of Swamp Sclerophyll Forest on Coastal Floodplain on the NSW North Coast (SSF EEC). However the OEH considers (identification of) SSF EEC on the subject site is likely to be erroneous, given the vegetation appears to conform with the Littoral Rainforest EEC, and the soils on the site are derived from Aeolian sands which do not form part of, or are associated with, a coastal floodplain.*

OEH comments that mirror those in the Clarence Environment Centre's (CEC) submission, include:

- *“given that a variety of native flora species have persisted on site, it appears that such areas still have biodiversity value and potential to recover”.*
- *“The FFIA does not consider the likely occurrence of several threatened species on the subject site including Spotted-tailed Quoll, Brush-tailed Phascogale, Squirrel Glider, Wompoo Fruit-dove and Superb Fruit-dove. All these species have been previously recorded in habitats adjoining the subject site and suitable habitat resources for these species occur on the subject site.*

Furthermore, although not previously recorded in the vicinity, the subject site also represents suitable habitat for the Common Planigale. The FFIA should be revised to include assessment of potential impacts on these threatened species.” On the request for potential impacts on the Planigale be assessed, the consultant revises the original DA's response from, *“No further impact assessment required”*, to a simple, *“Not required”*.

- *“The proposed development design provides insufficient wildlife corridor function, effectively severing existing vegetated links between Iluka NR and other isolated forested remnants west and north-west of the subject site.”*
- *“The total biodiversity impacts, including the indirect impacts, need to be quantified”.*
- *“Following a site inspection the OEH believes the subject site does contain two EECs not identified in the FFIA:*
 - *Coastal Cypress Pine Forest in the NSW North Coast Bioregion (CCPF EEC), and*
 - *Littoral Rainforest in the NSW North Coast, Sydney Basin and South East Corner Bioregions”.*

Given our own assessment of the impacts on flora and fauna as a result of the total loss of some 19ha of habitat, and its replacement with wall to wall bricks, concrete and bitumen, possibly 400 motor vehicles, domestic cats and dogs, along with swimming pools fences and other man-made structures that kill wildlife, we determined that the development should not be allowed to proceed.

Given the OEH's responses above, it is clear that that agency too, believes the impact is excessive. However, somewhat surprisingly, given the above comments, the OEH add the following comments:

- “The overall scale of the development should be **reduced** and the proposed wildlife corridor areas expanded to incorporate a greater proportion of biodiversity values on site, including hollow-bearing trees, koala food trees and EECs”.
- “Unavoidable biodiversity impacts should be offset using a transparent and repeatable process in consultation with the consent authority”

These last comments essentially gives the proponent a green light to continue, albeit on a much reduced scale, and has resulted in the amended application which has barely changed from the original. According to Ocean Park Consulting (page 3 of the summary), the reconfiguration of the master plan, the scale of which which OEH hoped to see “reduced”, includes the following which see the total number of lots reduced by 3, from 162 to 159:

- **No change** to the configuration of reserve along the western boundary (Park A). This area will retain the most intact vegetation and landscape on site. It will also provide a direct link from the north to south.
- **A small increase** in the size of the reserve in the north eastern corner (Park B), with a much more functional layout. It will incorporate all *Eucalyptus tereticornis* Forest Red Gum trees observed and link directly with similar habitat to the east in Iluka Nature Reserve and provide a direct route to the golf course habitats to the north and other vegetation beyond.
- **An additional area** is to be reserved in Park C. This area **of 0.25 hectares** is intended to retain the best developed example of Coastal Cypress Pine Forest on site. Further, it links with large patches to the south in Crown Land.
- **The exclusion of development along the Elizabeth Street road reserve or Iluka Road reserve.** This will provide a visual buffer (at best, a mere 10m wide uncleared corridor) to adjoining residences as well as to Iluka Nature Reserve. Although narrow, it will also provide a corridor function for the movement of flora and fauna.

We suggest this is certainly not the scale of reduction the OEH was looking for.

Keystone Ecological also provides an impressive list of specialist botanists, herbarium staff, authors, and national parks rangers, who they had contacted in relation to the endangered *Acronychia littoralis* and other flora on the site, seeking: “Opinions and information from these experts regarding the following:

- *Acronychia littoralis*
 - * Locations and timing of flowering and fruiting of specimens of confirmed *Acronychia littoralis*
 - * Identification of specimens collected from the site and surrounds and from reference populations
 - * Locations of populations of confirmed *Acronychia littoralis*
 - * Identity and history of collections of *Acronychia littoralis* in the Iluka area
- Identification of other plant specimens collected from the subject site
- Mapping and analysis of the vegetation in the local area
- Identification of Emu scats collected from the subject site

At this point the reader could be excused for thinking Keystone Ecological was on the right track, but then they state: “Note that opinions and conclusions regarding *Acronychia* and Coastal Cypress Pine Forest expressed in this report **are not necessarily attributable to the experts consulted above**. However, their opinions and shared information were used to inform this report and its conclusions”.

One has to ask, why they did not take advantage of the experts' opinions, instead of inferring that they, Keystone Ecological, know better? i.e. We listened to the experts, but didn't agree with them, so these are **our** conclusions. We suggest the experts' opinions would not have supported the planned destruction of native vegetation, or support Keystone's conclusion of no significant impact!

Specific comment

1. *Acronychia litoralis*

The amended DA contains several pages of a detailed search for lost specimens of *Acronychia litoralis*, collected by a variety of people and sent to various herbaria over an extended period. This is designed to cast doubt on the veracity of the claim that the species, one specimen at least, occurs on the site. Keystone Ecological even stoops to claiming: *“There is tantalizing evidence to suggest that this specimen may have been collected from the Landcare works area”*.

At least we give credit for the effort put into the research, with no less than 9 pages devoted to questioning the occurrence of that threatened species on the site. However, we do question the value of studying plants in Port Macquarie, almost 300km south of the site, rather than looking at those known to occur in the vicinity of the Esk River, just up the road from the subject site.

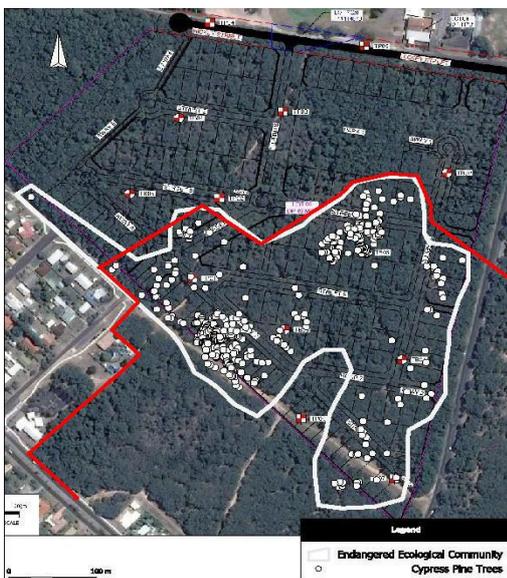
In conclusion, we believe that in this instance, there is a clear need to consider the “Precautionary Principle” which, put simply, states that scientific uncertainty should not be used as justification to disregard potential threats.

2. Coastal Cypress Pine Forest EEC

Keystone Ecological makes a surprising claim (page 23) that: *“This vegetation community had not been previously recognised as occurring on the subject site or in the local area”*.

This statement is patently untrue, as the Clarence Environment Centre, having been alerted to the Pine's occurrence at the site, undertook surveys which identified a large percentage of species listed in the Scientific Committee's determination as being indicative of that EEC. We publicised that fact through a letter to the editor in the Daily Examiner in about 2012, which triggered a response from the proponent's lawyer, delivering an unsubtle threat of legal action for trespass.

How Keystone Ecological could possibly present an impact assessment that completely ignored this



Coastal Cypress Pine Forest
Endangered Ecological Community

Universal Transverse Mercator - Zone 58
Lat: 33°01'13.00" S
Lon: 151°22'59" E

EEC in their original DA is incomprehensible. However, the amended DA does finally acknowledge the community's occurrence on the site, and references the GPS mapping painstakingly compiled by local residents.

That mapping identified that there is approximately 10ha of the Coastal Cypress Pine EEC on the subject site, and Keystone Ecological acknowledges that: *“This additional survey on the subject site was guided to some degree by results of a survey undertaken by locals and published on the blog North Coast Voices”*.

They then undertook plot and meander surveys from 13th to 15th February, 2016 - 19th to 24th May 2016, and 28th to 30th June 2016, and claim to have found only 19 of the 50 species listed in the Scientific Committee's determination as indicative of the Coastal Cypress Pine EEC's occurrence.

Previously, independent botanists had identified 27 indicative species, and here are some pertinent points that need to be made by way of an explanation of that discrepancy:

- The period covered by Keystone Ecological's surveys came at the end of one of the driest 12 months on record, with some areas of the Clarence measuring less than half the average annual rainfall. As a result annuals, perennials, and possibly even some species within the shrub layer would have been vastly diminished.
- The Scientific Committee's list includes species for that EEC across its entire range. Some of which do **not** occur in the Clarence Valley, so the full 50 species will never occur at any one site
- The Coastal Cypress Pine EEC extends into the Iluka Nature Reserve on the eastern side of Iluka Road. Therefore the boundary of the population, delineated by the white line on the above map, should rightfully be drawn to the edge of Iluka Road. Likewise, with the population also extending across Elizabeth Street. The **red** line is where the population's boundary should be drawn.
- Keystone Ecological surveyed 10 plots, amounting to an estimated 10% of the mapped population area. Their meander surveys would likely have covered another 10%, leaving 80% of the population's area not surveyed.

Is it any wonder they only identified 19 of the 50 indicative species? Nevertheless, the opinion of the Clarence Environment Centre's botanists, and others involved in the independent surveys, has been supported by OEH botanists, as indicated by their statement: *“Following a site inspection the OEH believes the subject site does contain two EECs not identified in the FFIA”*, including: *“The Coastal Cypress Pine Forest in the NSW North Coast Bioregion”*.

The NSW Scientific Committee's determination (SCD) clearly explains that: ***“The species composition of a site will be influenced by the size of the site, recent rainfall or drought condition and by its disturbance (including fire) history. The number of species, and the above ground relative abundance of species will change with time since fire, and may also change in response to changes in fire regime (including changes in fire frequency). At any one time, above ground individuals of some species may be absent, but the species may be represented below ground in the soil seed banks or as dormant structures such as bulbs, corms, rhizomes, rootstocks or lignotubers. It should be noted that the DA repeatedly stresses that the site has a long history of frequent fire*** (E page nos – 12; 27; 87; 97; 106; 117; 120; 129, and 149)

Keystone Ecological goes to great lengths describing past events that have all but wiped out this endangered community, stressing the fact that some quadrats, a mere 20m x 20m, contained only one *Callitris columellaris* specimen, or that they were saplings, somehow claiming they shouldn't count. In doing so, they discard some 8 to 9 hectares of the community that was mapped by the community members.

We know the consultant referred to the Scientific Committee's determination (SCD) before proffering these opinions which are made despite quoting the SCD (page 23) which states: ***“The Final Determination further details that it may occur as isolated remnant trees in sites affected by partial clearing, tree senescence or fire.”***

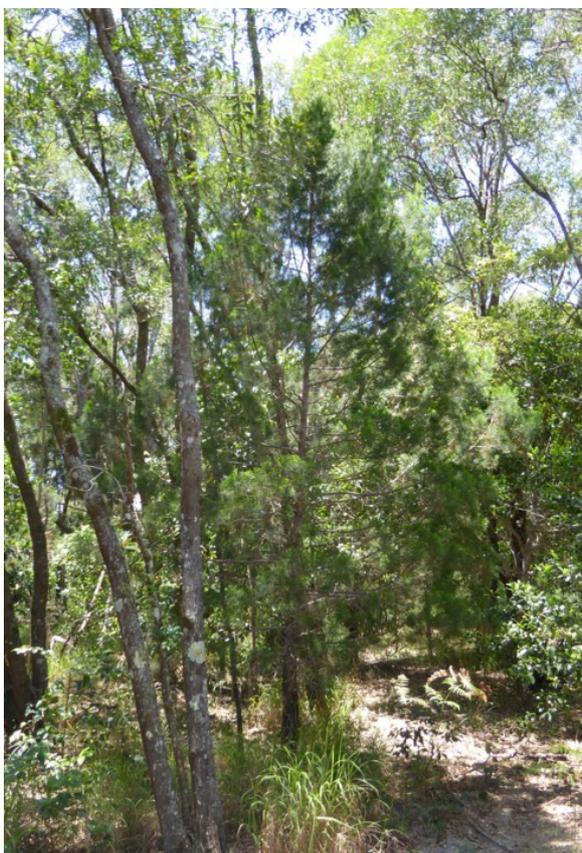
However, that document would not have supported the proponent's objective, which is to justify the destruction of some 9ha of EEC, so they argue that the scale of destruction caused by the sand mining was *“outside the definition”* of the disturbance described by the SCD. However, the claim that the site was, *“burnt to mineral earth”*, before it was sand mined, is fanciful, as is their implication that the wattles and weeds, and presumably the Pines, were subsequently planted by over-zealous land care volunteers.

Regardless of all that, it is clear from the aerial image of the cleared site on page 13 of Keystone Ecological's assessment, that a significant amount of vegetation, including mature trees, remained in what appears to be windrows where seed containing overburden would doubtless have been stockpiled, awaiting redistribution during the rehabilitation of the site.

The SCD makes it clear that much of the land supporting the remaining remnants of Coastal Cypress Pine forest has been previously cleared and/or severely degraded, and makes allowances for that scenario, claiming: *“Stands of the community that have been partially cleared in the past may be reduced to scattered trees and a few characteristic ground cover species, possibly with other native species represented in a soil seed bank. Fires may also influence the structure of the community, as the dominant tree species, C. columellaris, is generally killed when burnt. Post-fire regeneration of the community may therefore have the structure of shrubland or heathland for many years.”*

Claims by Keystone Ecological that the Coastal Cypress Pine is the most common Pine species in Australia, is another 'red herring' and totally irrelevant. It is the ecological community, the amalgam of species that make up that vegetative community that we are considering.

Likewise their arguments that many of the 50 plants on the list of indicative species are common and occur in a wide variety of communities, and therefore don't count, is also a deliberate diversionary tactic. It is the occurrence of those common species alongside the *Callitris columellaris* that determines the community to be the Coastal Cypress Pine EEC, one of the rarest endangered communities in NSW, and it has been declared endangered because **unless current trends are reversed, that community will become extinct.**



Typical view of a recovering endangered Coastal Cypress Pine Community

The opening statement in the NSW Scientific Committee's determination is quite clear on this matter, stating:

1. *Coastal Cypress Pine Forest in the NSW North Coast Bioregion is the name given to the ecological community dominated by Coastal Cypress Pine, Callitris columellaris, found typically on coastal sand plains, north from the Angourie area on the far north coast of NSW. The community is characterised by the species listed in paragraph 2, and typically has a closed to open canopy of C. columellaris, which may be mixed with eucalypts, wattles, banksias and/or rainforest trees, and an open to sparse understorey of shrubs, sedges and herbs. Structural forms of the community include woodland, open forest and closed forest, although the tree stratum may be very sparse, absent, or comprised only of dead trees in stands affected by partial clearing, tree senescence or fire.*

The draft EIS for the Woolgoolga to Ballina Pacific Highway upgrade confirmed the community's rarity when it identified the fact that there was only 84.5 hectares of this vegetation community mapped within a 30 km of the project area.

To conclude it is worth stressing that it is an offence to “pick” or damage any plant in an EEC, punishable by fines in excess of \$1,000 and/or prison, for each plant damaged; the proponent plans to bulldoze approximately 10ha of Coastal Cypress Pine EEC, and offers to set aside a paltry ¼ hectare for protection (by whom?) as an off-set. Clearly, this should not be an option.

3. Other threatened species assessment

In response to the exhibition of the original DA, the OEH identified a need to assess the impacts on a number of threatened species that had not been dealt with, observing that: “*The Flora and Fauna Impact Assessment (FFIA) does not consider the likely occurrence of several threatened species on the subject site including Spotted-tailed Quoll, Brush-tailed Phascogale, Squirrel Glider, Wompoo Fruit-dove and Superb Fruit-dove*”. In fact the DA clearly acknowledges that the Superb Fruit-dove was heard calling on the subject site.

In what can only be described as an arrogant display of defiance of OEH's request for further assessment, the section pertaining to threatened species in the amended DA is presented seemingly unchanged. Also, despite having identified Superb Fruit-dove on the site, they still refuse to comply with the request to properly assess the impacts of the proposal on that species.

In our response to the original DA, the Clarence Environment Centre pointed out the unconscionable manipulation of facts and records pertaining to Squirrel Gliders by Keystone Ecological, where they hid the fact that the gliders had been recorded in that very forest, albeit not actually on the subject site, and still they refuse to properly assess the impacts.

Excerpt from the Clarence Environment Centre's original submission

8. Manipulation of Wildlife Atlas Records to downplay impacts on Squirrel Gliders.

Threatened Squirrel Gliders, a female and two young, were collected at Conrad Close by wildlife carer group WIRES on 3rd November, 2006. All were deceased as a result of a cat attack, and entered onto the NSW Wildlife Atlas in October 2008. Conrad Close, where the animals were collected, is less than 500m to the north-west of the subject site, and a part of the same contiguous forest corridor that currently includes the subject site.

We identified this fact as being at odds with the DA's claim that “*the closest (record) is less than 1km south of the subject site in 2010 and the most recent being 5km south (in Yamba) of the subject site in 2012*”. On that basis, despite acknowledging there is a “*moderate likelihood*” of the species occurring on the site, and that there is habitat and potential den sites, the DA concludes: “*No further impact assessment required*”. We initially saw this as a problem with the Atlas itself.

However a search of BioNet (the Wildlife Atlas) revealed that there are actually 7 records of Squirrel Gliders within 1km of the subject site, the closest, as the consultant claimed, less than 1km, it was a dead animal, found in Duke Street, less than 200m from the subject site. In fact the closest forest is on the subject site, and most likely where it came from. By reporting just two records, the closest and latest (which was in Yamba), the consultant was able to avoid mentioning the other 6 Iluka records, three in Conrad Close, one in the Iluka Nature Reserve, and another on Iluka Rd near the Golf Club, all on neighbouring land, on all sides of the subject site, and the final record on the track to Saltwater Depot.

The manipulation and deception is complete, the consultant paints a picture showing the Squirrel Gliders are no longer present, and assess that: “*No further impact assessment is required*” **This is clearly unacceptable.**

We see no reason to change that opinion.

4. OEH requests for assessment of cumulative impacts ignored

The proponents have similarly 'thumbed their noses at OEH's request (Item 9) that: *“The total biodiversity impacts, including the indirect impacts, need to be quantified”*. Despite claiming (page 23) that: *“This aspect has been reviewed and assessed in detail in the report Additional Flora and Fauna Impact Assessment dated 31 October 2016 by Keystone Ecological”*, we could find no such assessment of cumulative impacts.

It is crucial that cumulative impacts be properly presented and assessed. We cannot accept the consultant's care less assessment that the development will have no significant impact!

5. Core Koala habitat

The fact that the DA claims (page 10, Statement of Environmental Effects (SEE)) that: *“The site does not contain core Koala habitat sensu SEPP 44 and so no further consideration need be given to the provisions of this SEPP”*, is also a major concern. This statement is made despite the consultant ecologists themselves gathering a motion detection camera image of a Koala on the site.

This is a threatened species which is suffering major declines across NSW, and one listed as vulnerable under both State and Federal legislation. In fact the DA acknowledges that the declines in a number of coastal Koala populations have been so serious, that the threat status for those populations has been raised from Vulnerable to Endangered.

As for the Iluka Koala population, the DA reports it is: *“Thought to be (at least functionally) extinct”* (page 124 FFIA), a quote referenced to a 14 year old study (*Lunney et al. 2002*). However, the consultant has seen fit to ignore a later study commissioned by Clarence Valley Council in 2012, by renowned Koala expert Steve Phillips (*Biolink, S. Phillips & M. Hopkins*).

That later report found that: *“Amongst the anecdotal records are indications of at least one breeding female. Such data establishes that the suggestion of the demise of the Iluka population as reported by Lunney et al (2002) and the Recovery Plan (DECC 2008) has been premature”*.

To complete the perception that Koalas are in terminal decline at Iluka and not worth considering, there is a reference to the NSW Wildlife Atlas records, with the claim (Appendix 2, page 124) that: *“The most recent (Atlas) record was 5km north west of the subject site in 2013”*, when in fact, more recent recordings have been made from the Iluka area.

This is not so much a criticism of the consultants, as of the clumsy Wildlife Atlas process itself, where the task of recording specific sightings or occurrences of flora and fauna is left largely to volunteers, or unpaid Scientific Licence holders who are required to atlas their findings as a condition of their expensive licence. The process of atlasing is complex and time-consuming, so many sightings are never recorded, and seldom in a timely manner.

Also, many of the records are “quarantined”, a necessary process designed to ensure erroneous reports do not appear on the Atlas until confirmed by a qualified person. But that can take years.



A female Koala and Joey filmed in an Acacia tree on the subject site in late 2011

A number of Koala records for the Iluka area have in fact been lodged since 2013 by WIRES. One, a sick adult male Koala was picked up on 3.6.2015, between the Woody Head turnoff & Saltwater Depot, and transported to WIRES in South Grafton by National Park ranger, Mark Fletcher. **It was attased by WIRES' Koala Coordinator and threatened Species Officer, Patricia Edwards in July 2015.**

The Clarence Environment Centre has sighted video footage of a female Koala with a joey on the subject site taken in late 2011, an event Phillips noted in his 2012 report. **So while the habitat there, when measured by percentage occurrence of feed tree species listed under State Environment Planning Policy (SEPP) 44, may not meet the criteria for “Core Koala Habitat”, a breeding population as evidenced by a female and young certainly does.**

So it's clear from photographic and on-going anecdotal evidence that, while Koalas may not use the subject site as a major feed source, they do use the site to traverse the landscape in search of food.

One major criticism we had of the original FFIA was the claim (page 32) that: *“The Koala observed on site was walking along the ground – not foraging in the trees or moving through the canopy – and moving from south to north.”* We are pleased to note that that inane comment has been deleted from the amended version.

Having said that, the subsequent response is a promise to make a **“*small increase* in the size of the reserve in the north eastern corner (Park B), which “will incorporate all Eucalyptus tereticornis Forest Red Gum trees”**. We suggest this minuscule addition will in no way meet the requirements of Council's Comprehensive Koala Plan of Management, or the Environment Planning and Assessment Act.

We assert that retaining a tiny area of Koala habitat (Park B), 1.8 hectares, completely surrounded by roads and fenced back yards with swimming pools and dogs, is a recipe for disaster.

The DA acknowledges the occurrence of Forest Red Gum and Narrow-leaved Grey Gum, both preferred feed species, and Broad-leaved Paperbark, also a known Koala feed tree. It also acknowledges the occurrence of high quality Red Gum habitat in the Bundjalung National Park bordering the development site to the east, and in forest bordering the north-west of the site. However, there is no habitat connectivity to the west of Park B, and only the 10m wide strip along the busy Iluka Road where koalas can play Russian roulette with back yard dogs on one side and traffic on the other.

In declaring the Koala to be a threatened species, the NSW Scientific Committee identified a series of threats facing the species, specifically, clearing of **“*native vegetation*”** (not only Koala feed trees); vehicle strike (road kill), and most commonly in urban areas, attacks by dogs.

The DA acknowledges some of these threats, including:

- a) The almost total removal of vegetation from the site, which is addressed by the oft-repeated assurance that: *“Potential adverse impacts on Koalas will be further mitigated by the implementation of a landscape plan that includes the planting out of the wide verges with native trees favoured by Koalas, such as Eucalyptus tereticornis Forest Red Gum and Corymbia intermedia Pink Bloodwood”*. **Note:** This is something that Council is unlikely to approve for purely safety reasons. That plan is also at odds with the assertion (Page 7 Statement of Environmental Effects (SEE)) that: *“The wide verges proposed throughout the subdivision serve (to provide) adequate asset protection zones for bushfire protection purposes”*. **Planting highly flammable Eucalyptus trees for bushfire protection? Is this really logical, or just a matter of “say something often enough, and people will believe it?”**

b) In an apparent acknowledgement that removal of all trees from the site will force Koalas to travel through the area on the ground, the DA announces the construction of “*Traffic calming devices including speed bumps*” within the subdivision to reduce the possibility of vehicle strike. However, the additional 320 vehicles that the subdivision is likely to generate will be venturing well beyond the subdivision's limits.

The 19km long main road from Iluka to Woombah, much of which runs through national park, recently had its speed limit increased from 80 to 100kph. The additional 320 vehicles using that road ferrying residents to work, specialist medical care, supermarkets, high school, and a myriad services only available in large towns like Maclean (30km) or Grafton, over 70km away, **will increase road mortalities and trauma for all fauna species.**

c) While not specifically identifying dog attack on Koalas as a threat resulting from the development, the DA does however promise that, “*Domestic pets are to be kept within fenced premises, especially at night*”. This again appears to be completely at odds with the promise that there will be: “*Open style fencing that will not impede Koala movement*”, a promise the developer will never be around to enforce.

Clearly the development will have seriously negative impacts, not only on the Koala population, but all 112 animals and bird species that are currently known to use the site. Therefore, the Clarence Environment Centre believes that, given the Biolink assessment of a possible recovery of the Koala population, that the impact of the development will be excessive. The DA's attempted amelioration of the impacts resulting from replacing 15 hectares of forest with 5 new urban streets and 162 houses, are unrealistic to say the least, and will not mitigate the impacts on Koalas, so we strongly believe the DA should be rejected for the reasons outlined above.

We disagree completely with the consultants' assessment that there is no need to refer the DA to the Federal Minister for assessment under the EPBC Act. Well known Koala expert Steve Phillips, who has studied the Iluka Koala population, also disagrees, and has pointed to the Federal Government's referral guidelines which includes scores and associated decision path as follows:

1. Koala Occurrence: scores 2+ - evidence of one or more koalas within last two years.
2. Vegetation composition: 1+ - has forest/woodland with only 1 spp of preferred food tree.
3. Connectivity: 0 – would otherwise be contiguous if not for road
4. Key Existing threats: 2+ (or 1+) – threats are low on site at the moment
5. Recovery Value: 2+ - habitat is important in terms of EPBC interim recovery objectives.

He concludes: “*The preceding assessment is conservative but results in the site scoring a minimum 6+ or 7+. Note that if a site scores 5+ (or more) then for EPBC purposes it is regarded as habitat critical to the survival of the koala. Decision Pathway for purposes of Figure 2 in Section 7 of referral guidelines is ‘yes-yes-no-yes’.*”

For the purposes of various tables in Section 8, Mitigation standards proposed by development all rate low and referral would again be recommended on basis that a) carrying capacity of site will be reduced and b) there will be significant loss of habitat”.

The Iluka Koalas cannot afford the loss of any more of their habitat and, we believe, the DA should be referred to Federal Government and assessed as a Controlled Action.

6. Endangered Coastal Emu population (*Dromaius novaehollandiae*)

As with the Koala, the Coastal Emu population has been in serious decline for decades with estimated numbers now less than 100 birds scattered across the Clarence Valley, so Emu sightings at or near Iluka are now rare. Therefore, it is significant that the proponent's consultant ecologists have reported finding Emu scats on the subject site (presumably confirmed by analysis). That sighting is consistent with anecdotal reports of occasional sightings by residents over the past year.

We strongly believe that providing small 10m wide vegetated corridors on roadsides as movement corridors for Emus, will be a disaster, and foresee a steep rise in road kill events for all fauna. Contrary to the DA's assertions, the subject site does contain prime Emu habitat, with a number of feed species growing on the site, including Geebung (*Persoonia stradbokensis*), Tree Broom Heath (*Monotica elliptica*), Midyim Berry (*Austromyrtus dulcis*), Flax Lily (*Dianella caerulea*), Sword Grasses (*Gahnia* species) and various Lilly Pilly "*Syzygium* species". Therefore, removal of the native vegetation on the site will have a negative impact on any remaining Emus.

Also, there is a current push to 'rescue' the Coastal Emu population in the Clarence, **and the retention of suitable habitat is critical to that recovery.**

However, despite acknowledging that the Coastal Emu, "*has declined in recent times with too frequent fires, loss of habitat outside of the reserve, road trauma and predation of eggs and chicks by exotic predators*", the proponent claims that the loss of **20 hectares of known prime habitat**, the addition of some **300 motor vehicles**, and hundreds of **domestic dogs**, "*is unlikely to have a significant adverse impact on this endangered population*", and even hints that the project is doing the birds a favour by removing existing dense thickets of Lantana (page 39 of the original FFIA).

The Clarence Environment Centre is currently working with the Save the Coastal Emu Committee along with government agencies, property owners, and other stakeholders, as part of the Upper Coldstream Biodiversity Project, so we strongly believe that the DA's assessment of no significant impact is simply not good enough, and if the Emus are to survive, the retention of habitat, and it's connectivity to surrounding bushland is paramount.



Map showing the reality. All the pale green area, less the retained parkland, will be bulldozed.

To address the issue, the SEE makes the claim that the Masterplan has been, "*amended to ensure retention of areas of significant vegetation for the incorporation of fauna corridors in parklands that provide connectivity.*" This statement is patently incorrect, and deceptive because the retained 10m strips along Iluka Road and Elizabeth Street are simply tiny extensions to the existing vegetation in Bundjalung National Park from the east, and crown land to the south (see map above).

Clause 8 of SEPP 71 (Coastal Protection), sets out "*matters for consideration*", including, "*existing wildlife corridors and the impact of development on these corridors*".

7. Loss of a vital wildlife corridor link.

With repeated reference to "*wide street verges*" which "*will serve a number of purposes including biodiversity corridors*", it is clear the authors of the Statement of Environmental Effects (SEE) are acutely conscious of the fact that an important wildlife corridor will be seriously depleted.



This broad-brush mapping was never intended to delineate the exact boundaries of bushland corridors used by wildlife.

Responding to this the SEE reverts to a blatant lie claiming *“The site is adjacent to, but not within a recognised regional wildlife corridor”*, attaching the map above right to prove the point.

When considering the 'broad brush' mapping scales used to identify wildlife movement corridors across the state, to claim the site is not within a recognised wildlife corridor is ridiculous.

The consultant also quotes from *“Key habitats and corridors for forest fauna”*, Scotts 2003. Mapping derived from Scotts' work was included in the North Coast Regional Biodiversity Strategy, 2009 where national parks and crown land are presumably accepted as “safe” so the corridors are not superimposed across those areas on the map.

However, the subject site was mapped as crown land in 2003 when *“Key Habitats and Corridors”*, was published, and clearly shown as such. There is no argument that all forested land on the Iluka peninsula, including the subject site, was intended to be a component of the regional north – south wildlife movement corridor.

While the national park estate will continue to maintain the corridor's connectivity, the proposed development will reduce it, and completely remove a critical east - west link for many species, something SEPP 71 requires developments to avoid.

8. Impacts on the Iluka World Heritage Area

The IUCN (the International Union for the Conservation of Nature and Natural Resources) has expressed concerns regarding the high impacts of adjacent land-use on the outstanding universal values of the Gondwana Rainforests World Heritage Area. The only specific issue mentioned in their outlook, published in 2014 (but based on an assessment conducted in 2012), was in relation to Iluka Nature Reserve.

See http://www.worldheritageoutlook.iucn.org/search/sites/-/wdpaid/en/12202?p_p_auth=2MV0kDQ8

The current threats to the World Heritage area (listed in the Full assessment, under Threats, and then Current Threats) include the following:

Housing/ Urban Areas - High Threat

“Incompatible land-use on adjoining properties and pressure for residential and tourist development due to increasing urbanization and population pose a high threat. Diversity in local government zoning policies creates a potential for inconsistent planning (Periodic Report, 2003)”.

The IUCN is clearly concerned at urban encroachment, but is probably unaware that recent legislative requirements in NSW actually require public land managers to develop “Strategic Fire Management Plans” where their land abuts residential areas. This is an emerging threat to all forest types, particularly in National Parks which are supposedly created to protect our natural assets.

In the case of the Hickey Street development, it will likely mean changes to the management of the endangered Coastal Cypress Pine community in the national park immediately adjoining the eastern edge of the site (the Iluka Land Care Project area), with that immediate area being impacted by 3 Key Threatening Processes as a direct result of the proposed development:- “edge effects”, and now to protect this new urban development from bushfire, “too frequent fire”, and/or “clearing of native vegetation” for hazard reduction.

The DA however, concludes that: *“The proposed residential development of the subject site will not interfere with any of these values”*. That response is clearly inadequate, and ignores the threats, identified by the IUCN, the development will create. Impacts on World Heritage sites need to be referred to the Federal Government

9. Key threatening processes

a) Clearing of native vegetation.

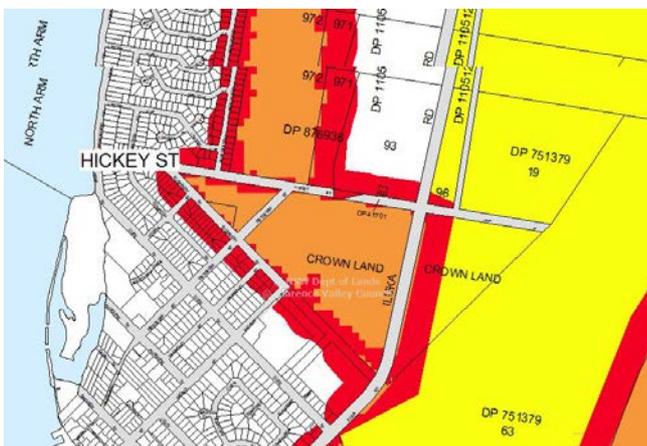
The proponent's ecologists have done an excellent job in identifying 112 species of fauna, including 13 that are listed as threatened or otherwise protected under international treaties with China and Japan, all of which are facing extinction if current trends are not reversed.

In determining that these species are threatened with extinction, the NSW Scientific Committee has identified the threats each species is facing. In almost every case the primary cause of those declines has been identified as “**Loss of Habitat**”, mainly the clearing of native vegetation for a variety of purposes, including urban development. In situations where loss of habitat is threatening a species with extinction, it stands to reason that any further loss must be considered a significant impact. In the case of the Hickey Street development, there will be the total removal of between 15 and 20 hectares of native forest habitat, currently home to more than 140 plant species, and 112 fauna species, including the 13 known threatened species. There will also be a loss of habitat in all adjoining bushland, to comply with bushfire management plans.

There will also be a significant loss of native vegetation to allow: “*The re-alignment of the existing Elizabeth Street Fire Trail, such that it is located entirely within the adjacent Lot 7018 DP 115127 Crown Land, immediately adjacent the subject site*”. **The DA fails to clearly spell out this additional habitat loss.**

It would be virtually impossible to identify all flora and fauna on the development site, and the DA acknowledges that there is a **high probability that as many as 17 threatened species may occur**. All 17 have been assessed in the DA through 7 part tests, and in every case there is an acknowledgement that habitat will be lost, but a conclusion that there will be no significant impact from the development. **Again the Clarence Environment Centre deems this to be wrong.**

b) Impacts of frequent fire



The red shading depicts what Council deems to be bush fire prone vegetation, requiring regular hazard reduction, either by regular burning or under-scrubbing which leads to biodiversity loss.

High frequency fire is widely acknowledged as highly detrimental to biodiversity. However, because the bushland on the subject site, and on adjoining properties including the national park, is mapped as 'Category 1 Bushfire Prone', 100m wide asset protection buffers would normally be required.

The concern here is that the proponent has yet to prepare a fire management Plan, and we are concerned that the proposed 10m fire buffer proposed for the eastern boundary of the development will ultimately be declared insufficient protection. In that event hazard reduction, either by frequent burning or clearing of undergrowth, will be carried out in the forested crown land on the eastern side of Iluka Road.

As the DA explains, the aim is to achieve, “*very little ground and fine fuel, (with) no vertical connectivity between the ground and canopy and no horizontal connectivity between the tree canopies*”, **i.e. this involves removal of under-storey vegetation and thinning of larger trees to reduce canopy connectivity, and the only places this will occur are in the 3 reserves which are supposed to be biodiversity offsets, or off-site.**

There are no fire breaks cleared within the adjacent national park, so when hazard reduction burns are conducted, the fire simply burns until it encounters a natural fire break, such as a creek, is doused by rain, or simply burns itself out.

The DA has acknowledges the threats imposed on biodiversity by fire, including:

- “*Large hollow-bearing trees (in the subject site) occur, mainly as dead stags, killed by fire*”.
- “*the Woombah area (national park adjoining the village) has been documented as experiencing a fire every 5 years*”, a result of the bushfire management undertaken by the National Parks and Wildlife Service to protect the village at Woombah
- “*The Bundjalung Koala population was severely impacted by the fires of 1989 and 1994, thus removing a source of migrants*”.
- The Emu population, “*has declined in recent times with too frequent fires ...*”, etc.

Yet despite this acknowledgement, and because the frequent hazard reduction burning that will result from the development, will occur on neighbouring properties, the DA completely ignores the impacts the development will have.

Removal of native vegetation and/or regular hazard reduction burning, are listed Key Threatening Processes.

c) Loss of hollow-bearing trees and fallen timber

At the outset it is important to understand the time frames associated with the formation of tree hollows. Scientists from the Australian National University have published the following research showing that: “*The age at which trees form hollows is typically younger than when they form hollows suitable for occupancy by vertebrate fauna. **Hollows suitable for occupancy by vertebrate fauna generally do not occur in Eucalypts that are less than 120-180 years, with large hollows remaining rare in eucalypts under 220 years old (Mackowski (1984)).***”

According to the NPWS fact sheet (1999), “*In Australia many native vertebrate and invertebrate species utilise tree hollows, and in south east Australia this includes some 17% of bird species, 42% of mammals and 28% of reptiles (Gibbons and Lindenmayer 1997). They include bats, possums, gliders, owls, parrots, antechinus, ducks, rosellas and kingfishers as well as numerous species of snakes, frogs and skinks.*”

With younger trees having been routinely logged over the past 150 years, the 'recruitment' process for old-growth trees now has at least a 150 year gap, and with natural attrition rates steadily removing the remaining old-growth trees, we have long since reached a critical shortage of tree-hollows. This is evidenced by the fact that **almost half of NSW's threatened species are tree-hollow dependent.**

It is critically important therefore that hollow-bearing trees, and stags, be protected, something acknowledged by the Scientific Committee's listing of the removal of those trees as a Key Threatening Process.

The DA acknowledges the key threatening processes, loss of hollow-bearing trees and fallen timber, will occur across the entire 15 to 20 hectares of the construction site, **but fails to acknowledge that older hollow-bearing trees will also be removed from the bushfire buffer areas, and fallen timber in those buffers will be burned.** The National Parks and Wildlife Service is already undertaking that type of destructive action along trails in national parks, apparently as a matter of policy (reference letter to Clarence Environment Centre over the destruction of old-growth trees at Fortis Creek and Banyabba, 2015).

No less than 5 threatened, hollow-dependant species have been identified on the site, with every likelihood of more, yet the consultant claims the loss of this habitat, and likely death of those animals currently using the site, will have no significant impact. This assessment is, in our view, unacceptable, as is the suggestion that nest boxes, which will rot and disintegrate within a decade or be incinerated in the first bushfire (along with their occupants), will somehow adequately replace that habitat lost for the development, habitat which has been over 200 years in the making.

10. Failure to assess likely impact on Spotted-tailed Quoll.

The DA acknowledges (Appendix 2) that there is suitable habitat for Quoll on the subject site, all of which will be bulldozed for the development, and that the species has been recorded within 1km of the subject site (2004)(one of 16 local records in all). Therefore the assessment that: *“It is likely that the local population of this species persists only in very low numbers, if at all”*, is quite unbelievable, as is the conclusion that: *“Further assessment – Not required”!*

This species is listed as threatened under both state and federal law (endangered under the EPBC Act), and given the likelihood of its occurrence, a Species Impact Statement should be prepared and a referral made to the Federal Minister. **The loss of up to 20ha of habitat for Spotted-tailed Quoll must be considered significant.**

11. Failure to adequately assess likely impact on the Rainbow Bee-eater

The Rainbow Bee-eater is a migratory species protected under international treaty. The DA reports a: *“Large number (>100) records from the broader study area with the closest being within 1km north in 1978 and the most recent 4km south in 2012”*. This is a true indication of the inadequacy of the way the consultant reports the Atlas records, when following that statement with the admission that: *“This species was observed foraging and nesting on site”*, an occurrence that prompted a need for a further impact assessment. However, a search of the DA failed to find any further assessment.

The removal of between 15 - 20 hectares of known habitat for the Bee-eater has to be a significant impact, so **should therefore be referred to the Federal Environment Minister for assessment.**

12. Failure to properly assess likely impacts on the Grey-headed Flying-fox.

For the 7 Part Test the consultant is asked: *“whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan?”*

The Grey-headed Flying Fox recovery plan includes the following:

- *Identify and protect foraging habitat critical to the survival of Grey-headed Flying-foxes across their range; and*
- *Enhance winter and spring foraging habitat for Grey-headed Flying-foxes.*

Despite proposing the total destruction of between 15 and 20 hectares of foraging habitat, the DA concludes that there will be no significant threat to the species. **We strongly disagree, and point out that loss of habitat is what is currently driving the species to extinction. The fact that there is a Flying-fox colony literally on the site's doorstep, reinforces the need for foraging habitat.**

The Grey-headed Flying Fox is listed under both State and Federal legislation, so a Species Impact Statement should be prepared, and a referral made to the Federal Minister for the Environment.

13. Inadequate assessment of impacts on threatened species

Aside from those threatened species discussed above, there are a further 10 threatened species that have been identified as occurring on the subject site by the proponent's ecologists, who have recommended that “*Further impact assessment is required*”. They include

Wompoo Fruit-dove - *Ptilinopus magnificus*
Glossy Black-Cockatoo - *Calyptorhynchus lathamii*
White-throated Needletail - *Hirundapus caudacutus*
Barred Cuckoo-shrike - *Coracina lineata*
Sittella - *Daphoenositta chrysoptera*

Rose-crowned Fruit-dove *Ptilinopus regina*
Little Lorikeet - *Glossopsitta pusilla*
Rainbow Bee-eater - *Merops ornatus*.
White-eared Monarch - *Carterornis leucotis* Varied
Grey-Headed Flying-fox - *Pteropus poliocephalus*

According to the DA, there are also 9 threatened microbat species that have been recorded on the Iluka Peninsular, 3 of which were identified on site by the consultants. The DA also confirms there is suitable habitat on site for 8 of the 9 species, and declares that “Further impact assessment is required” for 7 of them. **We could find no “further assessment” of any of those species having been undertaken.**

There are also two species known to occur on the Iluka Peninsular, with existing records of occurrence within 1km of the subject site. They are: Barking Owl - *Ninox connivens*, and Brush-tailed Phascogale - *Phascogale tapoatafa*. The DA has acknowledged that there is suitable habitat for both species on the subject site, but expresses the belief that “*No further impact assessment is required*”. **Again we believe this type of 'white-wash' assessment is unacceptable and a Species Impact Statement must be prepared.**

14. Failure to Refer the DA to the Federal Minister for the Environment

The requirements of the *Environment Protection and Biodiversity Conservation Act (EPBC) 2000*, are clearly set out in the DA, requiring the assessment of impacts on all “Matters of National Environmental Significance” listed under the Act. In the case of the Hickey Street development proposal, these 'Matters' include the World Heritage area; nationally threatened species and communities, and Migratory species.

The DA also acknowledges the development will create 3 key threatening processes that will have negative impacts on all of the above, but assesses the impact to be insignificant. We disagree.



15. Bushfire management

The 10m corridor/buffer furphy

We believe the proposed retention of a 10m wide vegetated buffer along Iluka Road and Elizabeth Street, will not occur for bushfire safety reasons. Therefore its inclusion as some sort of mitigating factor is misleading, and should be rejected.

The map at left clearly shows the bushfire threat, particularly from the Bundjalung National Park to the east of the subject site, which means the OEHL will be required to

manage bushfire threats to the proposed residential area, either through frequent hazard reduction burning or vegetation thinning and removal, both of which are key threatening processes.

The “Bushfire Hazard Assessment Report” is difficult to understand. It contains Council's bushfire prone land map, showing the 100m buffer along the eastern boundary, but the report itself only recommends a 10m buffer, shared equally, 5m on the residential back yards, and 5m cut from the 10m buffer so kindly offered as a wildlife movement corridor

Currently there is no Bushfire Management Plan, and the concept drawings, do not appear to allow for the recommended Asset Protection Zones but, as explained in the DA (Ocean Park Consulting. Page 3), this will, “*be managed through the Community Management Statement*”.

In fact the proponent appears keen to 'hand-ball' the entire bushfire management problem on to future property owners, explaining (Ocean Park Consulting. Page 7): *The Community Title Subdivision incorporates specific requirements to be provided in the Community Management Statement to define the obligations of the members of the Community Title Subdivision to be responsible for the implementation of the Bushfire Management Plan, Cultural Heritage Management, and maintenance to open space areas within the subdivision (Park A, Park B, Park C).*

This abrogation of responsibility for future bushfire planning is further reinforced by the explanation (Building Code & Bushfire Hazard Solutions Pty Limited. Page 16): “***No new dwellings are proposed as part of this DA. Those new allotments that are mapped as Bushfire Prone Land following this subdivision may require further assessment under the housing Codes SEPP or s79BA of the Environmental Planning and Assessment Act 1997 at the time of any future application for the construction of any new dwellings on these newly created allotments***”.

Vegetation mapping – Littoral Rainforest Endangered Community

There are numerous references throughout the DA to vegetation mapping in Drawing *PO147-02(A)*. We could find no such drawing!

However, the OEHL did identify the occurrence of Endangered Littoral Rainforest Community on the site, and ask that it be properly mapped. Again we can find no evidence of this occurring, other than the promise that “***The best quality habitat of the highest conservation value (Community 190: Coast Banksia woodland with regenerating elements of Littoral Rainforest EEC) is to be retained and managed for conservation purposes***”. This “conservation” will occur in Park A which, according to the original DA (Section 4.5, page 35, Flora and fauna report), will be subjected to under-scrubbing for bushfire management, i.e. leaving “*very little ground and fine fuel, (with) no vertical connectivity between the ground and canopy and no horizontal connectivity between the tree canopies*”. **This is just another contradiction in a DA full of contradictory aims.**

As with the Coastal Cypress Pine EEC, the proponent again decides that not all areas of the Littoral Rainforest EEC needs to be protected, only “the best quality” parts. This is not acceptable, rare and endangered vegetation communities must be protected.

In conclusion

The cumulative environmental impacts of the proposed development, not only on the subject site, but also within adjacent bushland areas including World Heritage Gondwanan rainforest, and national park, are enormous. Social impacts too will be extreme, with inadequate facilities, and employment prospects.

As a result, we strongly believe the potential impacts of the proposal are so great that the DA should be rejected, and opportunities for the land to be acquired as an addition to Bundjalung National Park be explored.

The Clarence Environment Centre thanks Council for the opportunity to comment, and hope our concerns are taken seriously.

John Edwards
Honorary Secretary