

Re: Submission against the Residential Subdivision Sandy Beach North MP 05_0083 MOD 7

I would like to express my strong opposition to the proposed MOD 7 of the Sandy Beach North residential subdivision.

None of the concerns that I have expressed previously re MOD 5 for this development have been addressed by this proposal, in fact it is likely to have even more detrimental outcomes to the delicate mosaic of habitat that comprises the Hearn's Lake area, and to increase the threat to life and property due to flooding and coastal erosion. How this current MOD 7 application, effectively an expansion of the MOD 5 proposal, was even allowed to go to public submission when none of the concerns regarding MOD 5 have been addressed and astoundingly while the proponent is actually in the process of taking the CHCC and the Dept. Planning to Court regarding this development beggars belief.

Since none of my concerns re MOD 5 have been addressed by MOD 7 (in fact, they are only exacerbated) I include these first, followed by comments specifically on the MOD 7 application.

Concerns re MOD 5

The planning and approval process thus far: Beginning with the assumption of approval authority by Minister Tony Kelly (found corrupt by ICAC in 2011), this development has followed a dubious path which has attempted to deny both the CHCC and community members their legitimate input into the planning process. My understanding of the situation is that the DA was due to lapse in December 2017 unless work had commenced, and the developer is claiming that the demolition of houses signalled the commencement of work. However, one of the requirements of the DA was that the developer donate land to the Coffs Coast Regional Park prior to work commencing – and this has not happened. So has work commenced, or not? Is the DA still valid, or not?

Flood hazard to people and property: As discussed in further detail below, flood modelling used to predict flood heights was inadequate because of the berm height estimation, and no consideration was given to the further increase in berm heights, driven by expected sea level rise. CHCC has a duty of care not to approve residential developments in flood hazard areas, and may be liable if they do. Under flood planning clauses of the CHCC LEP, consent cannot be given when the development will negatively affect other properties in terms of flooding.

Environmental degradation of the site: I have many concerns in relation to the protection of the Hearn's Lake wetland complex. These are outlined as follows:

There is no consideration of the need to control domestic cats and dogs from the new residential areas.

Protection of Threatened Species and Ecological Communities

Wallum froglet

The most significant protection measure proposed for the wallum froglet is to maintain habitat areas preferred by this species.

The National Recovery Plan for the wallum sedgefrog and other wallum-dependant frog species (2006) identifies habitat loss as the most important threat to this species. Pre existing habitats have been extensively cleared - especially in northern coastal NSW in the last 15 years - a trend that is expected to continue, threatening much of the remaining habitat on freehold land. Predicted sea level rises are also identified as a potential contributor to habitat loss, including in conservation reserves.

The second most important threat to this species is identified in the Recovery Plan as habitat degradation, including through changes in hydrology, altered water chemistry and increased nutrient levels caused by urban development and other activities. Both the reduction and increase of the permanency of water may negatively impact wallum frog species, and changes in pH associated with changed hydrology can lead to the displacement of wallum frogs by other species.

Habitat eutrophication, especially increased nitrate levels, and pollution by toxicants contained in run off from urban areas is considered a threat to both the wallum habitat and the development and survival of frog larvae.

Areas most under threat are identified as the loss of habitat on freehold land through residential development and infrastructure, and the degradation of habitat in areas adjacent or adjoining residential developments.

The most pertinent objective of the Recovery Plan is to protect habitat critical to wallum frog survival and important wallum frog populations from threatening processes. The protection of wallum frog habitats is considered essential to the recovery of species listed in the Recovery Plan. Critical habitat management practices identified include minimising soil disturbance, to avoid earthworks which may adversely affect soil hydrology, the avoidance of further clearing of vegetation within wallum swamp and lake catchments, and the prevention of nutrient enrichment, including discouraging residents of wallum areas from using fertilizers on their lawns, and encouraging the planting of native species that tolerate nutrient poor sandy soils.

As discussed in detail below, this development plan does not allow for the migration of wallum habitat (a result of changes in hydrology from predicted sea level rise), thus threatening the existing habitat. In addition, the CMP does not address the prevention of nutrient enrichment and pollution arising from the residential development.

Coastal Saltmarsh

There is no Recovery Plan currently existing for Coastal Saltmarsh, although a Recover Plan is required to be produced (<http://www.environment.gov.au/cgi-bin/sprat/public/publicshowcommunity.pl?id=118>)

Coastal saltmarsh occupies the high tide zone on soft substrate foreshores of coastal lakes and estuaries, and is usually only intermittently inundated by medium to high tides. Saltmarsh provides habitat particularly for juvenile and small fish species, including commercially and recreationally important species, as well as birds, mammals, terrestrial and aquatic insects invertebrates. They provide summer feeding and roosting habitat for migratory wading birds such as Sandpipers. Saltmarsh in urban areas is often threatened by the activities of adjoining property owners. Threats to coastal saltmarsh also include changes in natural tidal flow characteristics, reclamation for development, and climate change and the associated sea level rise. As sea levels rise, the landward migration of saltmarsh will be restricted by topography and man made structures. It is predicted that in many places saltmarsh will have nowhere to migrate to and will be lost from some coastal sites. One recommendation to help protect coastal saltmarsh is to identify and protect areas where saltmarsh can retreat with sea level rise.

(http://www.dpi.nsw.gov.au/_data/assets/pdf_file/0007/459628/Coastal-Saltmarsh-Primefact.pdf)

Saltmarsh, like many wetland systems, provide several important ecosystem services, including food value (fish and shellfish), erosion control and storm surge protection, water quality maintenance, coastal biodiversity, recreational value and carbon sequestration

(<https://research.jcu.edu.au/tropwater/research-programs/coastal-estuarine-ecology/protection-and-repair-of-australias-saltmarshes/importance-of-saltmarshes>)

Both the wallum habitat required by the Wallum froglet and the Coastal Saltmarsh community are dependent on suitable inundation frequencies and water quality to survive. The Hearn Lake Estuary Management Plan (HLEMP) discusses the implications of global warming for changes to rainfall patterns and coastal inundation patterns, and recognises that the management of Hearn Lake over the next 50 to 100 years needs to accommodate the impacts of climate change, despite the degree of uncertainty in predictions.

The predicted increase in mean sea level will result in a net upward shift in typical berm heights of coastal lake entrances, increasing the potential water level in the lake and forcing a migration of wetland species and habitats landward, following their preferred inundation depth and frequency. If their migration path is blocked by topography or urban development, these habitats and their dependant communities will be lost.

In addition to sea level rise, the intensity of summer storms on the north coast is forecast to increase by nearly 22%, intensifying the risk of flooding. Total rainfall, however, is predicted to reduce, which, combined with increased berm height, will reduce the frequency of an open entrance. An increase in the proportion of time that the lake entrance is closed is considered to increase the natural sensitivity of the lake to external input.

The flood modelling previously undertaken has used a berm height lower than has been known to naturally occur, and no allowance was made for the increase in berm height expected to result from rising sea levels. There is an urgent need for a revised flood model to be undertaken to more accurately predict the impact on residents, property, and the environment.

CHCC has a duty of care not to allow residential development in known flood prone areas, and may be liable for any resultant flood damage. A critical priority of the HLEMP is to prevent the artificial opening of the lake entrance. The HLEMP recommends a policy that clearly articulates that artificial opening of the entrance to control flooding and foreshore inundation should be prohibited. It further suggests that all future development be considerate of the risks associated with flooding and foreshore inundation over the entire life of the development, taking into account changes associated with sea level rise. This development proposal does not meet these requirements due to a lack of appropriate hydrologic modelling.

More accurate modelling is also required to ensure that adequate space is left for the inevitable migration of wetland habitats landward. If not, these habitats, including the Coastal Saltmarsh and Wallum froglet habitat, will disappear, contravening the Biodiversity Conservation Act (2017).

When planning for future development, the HLEMP recommends consideration be given to conditions at the end of a realistic planning horizon, such as 100 years for residential development, given that protection of property will not be reliant on artificial entrance management to avoid inundation. As a result, the HLEMP recommends future development around the estuary is set back to a minimum of 50m beyond the RL 3.5m AHD contour. This requirement has been included in the Hearnese Lake/Sandy Beach DCP, and is defined as a buffer of 50 m from the RL 3.5m AHD contour. Draft LEP Amendment No. 29 has formalised this buffer by rezoning the foreshore land to environmental protection, thus preventing its use for future urban development. This development application is proposing significant development within the recommended buffer zone, and is thus contrary to the most critical and immediate required action identified in the HLEMP, the provision of an adequate buffer zone, and is also contrary to the Hearnese Lake/Sandy Beach DCP and the Draft LEP Amendment No. 29.

I note also that the HLEMP recommends that Hearnese Lake be listed as a SEPP 14 wetland, in recognition of its important wetland habitat values. These values are at risk of being degraded or lost should this proposed development proceed.

It should be noted that the consequences of not providing an adequate buffer zone around Hearnese Lake would be contrary to the principles of the NSW Coastal Policy 1997 –

- 1/ The precautionary principle requires a risk averse approach to decision making where there are threats of serious or irreversible environmental damage:
- 2/ Intergenerational equity requires that the environment is maintained or enhanced for future generations, achieved partly through the preservation of

essential natural and cultural resources of the coastal zone for the benefit and enjoyment of future generations:

3/ That the value of environmental services, (such as providing clean air or water), be considered in decision making processes. With a focus on estuarine water quality, the policy acknowledges that a significant cause of environmental degradation is the under or non valuation of the environment: and

4/ Conservation of biological diversity and ecological integrity to ensure that the productivity, stability and resilience of ecosystems is maintained (by promoting the reservation from development of critical habitat).

Relevant key actions of the Coastal Policy which are likely to be contravened include:

- Water quality in coastal waters will be maintained or improved (if currently inadequate);

- Protection and restoration of important fisheries habitats such as mangroves;

- SEPP 14 Coastal Wetlands will be rigorously enforced and extended where appropriate in recognition that what remains of these valuable ecosystems need to be fully protected from inappropriate development;

- Coastal lands and aquatic ecosystems with conservation values will be assessed and have appropriate measures taken to protect them, conserve biodiversity and to protect and ensure the recovery of threatened species;

- Sea level rise scenarios will be incorporated into management plans and other mechanisms, where appropriate, and:

- Further expansion of urban and residential areas will where possible, avoid or minimise the impacts on environmentally sensitive coastal areas.

This development is clearly inconsistent with the goals and guidelines of the HLEMP and the NSW Coastal Policy.

2.11 Coastal wetland and foreshore management

The stated desired outcome is to enhance the habitat values and prevent any degradation of such areas as a result of adjacent residential development.

Clearly, as outlined above, this development is unlikely to enhance habitat values and instead is likely to result in the degradation and loss of wetland habitat.

Concerns re MOD 7

Changes to conditions of the Concept Approval

The deletion of Condition A2 - This is directly contrary to the content of Condition A2, which specifies

“To avoid any doubt, this Concept Plan approval does not include any future development within the areas described as Stage 6, Stage 2 and that part of Stage 1 east of the extension of Ti Tree Road as depicted on the modified staging plan at schedule 3.”

The deletion of this Condition would result in exactly that happening.

The deletion of Condition B1 – specifically identifies that Stage 6, Stage 2 and part of Stage 1 are not approved and are to be added to the Conservation Area. Condition A2 makes it very clear (“**To avoid any doubt**”) that the future development of these Stages is not to be approved. The developer has provided no legitimate argument as to why it should be allowed, with the sole argument appearing to be the provision of vegetation offsets, which are addressed under C11 below.

The deletion of Condition B3 – is a referral to further requirements listed in C11, addressed below

The deletion of Condition C11 – C11 refers to the provision of appropriate offset for the development of Stage 5.

Aside from the legitimacy of the proposed use of off site credits (addressed below), the ecological assessment conducted by Cumberland Associates on behalf of the developer to calculate the required biodiversity offset requirements must be viewed with some suspicion, given that the NSW Land and Environment Court ruled against a similar argument used by Dr Robinson of Cumberland Associates, agreeing with the NSW Scientific Committee that EECs also occurred on soils and landforms associated with Coastal Floodplains. Thus the Flora and Fauna Assessment undertaken by Cumberland Associates has underestimated the ecological value of the land and the conclusions to support the deletion of C11 are invalid.

There are no specific details in the Transitional Part 3A Project Supporting Document regarding the proposed nature of off site vegetation credits. Off site credits will do nought to protect the biodiversity and conservation values of the Hearn Lake environs, and in fact, in a review of Biobanking by the NSW Office of Environment and Heritage (<http://www.environment.nsw.gov.au/resources/biobanking/20120061bbrevsum.pdf>) it is noted that:

Offsets not calculated or secured through BioBanking are mostly determined on a case by-case basis, and:

- ☐ are not necessarily equivalent to the losses sustained at development sites and therefore do not necessarily maintain current levels of biodiversity
- ☐ do not generally impose conditions relating to ongoing maintenance of the offset site
- ☐ do not always preclude future development of the offset site

The deletion of Condition C13 – refers to the requirement to provide evidence of an agreement for the dedication of land as addition to the Coffs Coast Regional Park prior to any construction.

The proponent has clearly not met this condition. There was no said agreement for the dedication of land prior to construction. The DA effectively lapsed in

December 2017 because construction had not commenced in accordance with the Concept Approval. The current DA is now void, and any further development should be considered in light of the relevant, current planning processes. The removal of Condition C13 would make a mockery of the authority of the planning process.

In summary

The development proposed will directly contravene several policies, planning instruments and legislation, including the NSW Coastal Policy 1997, The Hearnese Lake Estuary Management Plan (2009), the Hearnese Lake/Sandy Beach DCP (2005), and the draft LEP Amendment N0. 29 (of the Coffs Harbour City LEP (2000)). In addition, in light of the lack of consideration of climate change related sea level rise and the associated loss of critical habitat, the proposal risks contravening the Biodiversity Conservation Act (2017) by impacting severely on at least one Threatened Species (Wallum froglet) and one Endangered Ecological Community (Coastal Saltmarsh).

Regards,
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