

Draft Noosa Coastal Hazards Adaptation Plan

PUBLIC CONSULTATION FEEDBACK

TO:

The Chief Executive Officer
Noosa Shire Council
climatechange@noosa.qld.gov.au

8 March 2021

Dear Mr De Chastel,

As residents and/or owners of property in the Eastern Beaches (Sunshine Beach to Peregian), we are very concerned about the approach taken in this draft document and the restrictive planning scheme changes likely to follow.

We believe it is important to maintain the structure and character of the Eastern Beach suburbs while ensuring the dunes and beaches are well preserved and available to all.

These submissions are made by the Eastern Beaches Protection Association. The Association represents a substantial number of residents in the beach community from Sunshine Beach through to Peregian Beach. Individual residents will also be making their own personal submissions.

The submissions below address both technical and other matters relating to the draft Coastal Hazards Adaption Plan ("CHAP"), its supporting materials and related materials (such as Council interactive mapping) and proposed/potential changes to the Noosa Shire Planning Scheme.

1. Overstatement of Hazard Distances (Some properties unnecessarily regulated)

- 1.1. The first step for a Coastal Hazards Adaptation Programme is to accurately identify areas which are, or may in the future, be at risk of a range of coastal hazards. Without accurate identification the foundations upon which proposals and decisions are based will potentially be seriously flawed.

- 1.2. At the moment the hazard areas have not been calculated correctly which is of serious concern as it is essential that any such areas are determined correctly, and the proper outcomes communicated to the community so that a proper assessment of the risks and necessary measures can be made. Without a correct assessment there is a risk that funds spent by the Council will be unnecessary and wasteful.
- 1.3. In addition, any Planning Scheme amendment based on an incorrect assessment will be open to challenge and no doubt, the subject of major compensation claims by affected owners. Compensation is dealt with more specifically later in this submission.
- 1.4. There are fundamental flaws in the hazard mapping, noted below, that need to be corrected so that the Council and the community obtain a true understanding of the any potential risks.

First Fundamental Flaw

- 1.5. The first fundamental flaw is that the studies assumptions and reports fail to give any meaningful consideration to the effects of accretion along the coast. The fact that accretion is occurring is known to long-term users and residents of the Beach. Accretion can be seen from aerial photos and was mentioned in a 2008 technical study of the area by an experienced Coastal Engineer, Paul Prenzler. By way of example, an extract from this study, when talking about Peregrine Beach says:

“A comparison of aerial photographs from 1982 and 2004 indicates that an average annual accretion of 0.67m has occurred in this period.”

Second Fundamental Flaw

- 1.6. The second fundamental flaw is that the hazard mapping assumes that all the dunal areas seaward of the 2100 line are entirely “erodible sand” without vegetation – aerial photos along the Coast show that there is in fact significant dense vegetation all along the coast. If Council had consulted more effectively with the Eastern Beaches community earlier in its program, significant anecdotal evidence from long term residents would have also crucially informed Council in this regard. The assumption, identified above, is clearly factually wrong and has resulted in the EPA distances being substantially overstated. We also question why the hazard model, which must have as it’s fundamental starting point the current state of the dunes, would then expressly seek to use a false state.
- 1.7. The dunal areas along the Eastern Beaches are stable and have been accreting for many years – Council and their experts acknowledge this in their reports and the CHAP.
- 1.8. The theoretical hazard maps (based on erodible sand) may, at best, be a starting point but should not pretend to provide precise, real world guidance. To determine the actual level of potential risk, the actual circumstances “on the ground” must be reflected in any proposal. That is, the existence of significant, old and new, vegetation all along the coast. The aerial photos below are examples and can be replicated all along the coast. Council has indicated during meetings that vegetation is primarily useful for helping collect wind blown sand (which is then reflected in the modelling approach). We accept this is a function of vegetation, but reject entirely that this is its main function. It has been accepted for a substantial time that vegetation also provides enhanced stability and structural integrity to a dunal system.

Council attempts to reflect this in its modelling (as discussed later in this submission), however this is not adequate and the failure to accept substantial vegetation in the starting assumptions of the model and process is deeply flawed.

- 1.9. The presence of coffee rock all along the coast is well known. While it is not granite it does have a protective effect. When coffee rock is exposed, it is not washed away by the waves – it resists them, acts as an anchor point and is eventually covered with returning coastal sediment and sand. Not allowing for this fact in the studies' assumptions contributes significantly to the overstatement of the risk and erosion distance.
- 1.10. If Council faced an erosion issue, anywhere where the entire barrier was sand (as the calculations assume), the decision it would make about protective works, or any other measure, would be very different from the decision that would be made if there was a significant vegetated – as is the case along the Eastern Beaches.
- 1.11. This extract from the Project Phase 3 Report shows the assumptions made.

"3.7 Factor of Safety (F) ^[L]_[SEP] A 40% factor of safety has been applied to the erosion hazard area calculations for this study, as a conservative provision to acknowledge the uncertainties and limitations of the adopted methods and assumptions. In addition, there are many other conservative assumptions that underpin erosion prone area width assessment, including:

- *The design storm erosion event being characterised by coincident 100 year ARI storm tide and 100 year ARI wave conditions. It is assumed that the probability of this event occurring in any given year is less than one percent; ^[L]_[SEP]*
- *The assumption that the coastal barrier only contains erodible sands; ^[L]_[SEP]*
- *No recognition of existing (or possible future) shoreline erosion management activities such as dune revegetation, beach nourishment, revetment seawalls and/or other man-made structures designed to limit shoreline recession; and ^[L]_[SEP]*
- *Accurate cross-shore profiles, measured from the 2016 topography LiDAR survey and the 2012 bathymetric LiDAR survey."*

- 1.12. In relation to this issue, the Council's Climate Change Co-ordinator has replied to a submission about the failure to allow for existing vegetation in the following terms:

"The Brunn Rule does not consider the benefit of vegetation directly, as the impact of such vegetation is highly site specific and outside the scope of this investigation. Indirectly, the benefit of vegetation is incorporated within the calculations, as the vegetation provides a greater volume of sand to be retained within the dunal system that can then provide coastal protection during erosion events.

One of the key benefits of dunal vegetation is the stabilisation and retention of sediment that has migrated into the dunal area by wind. That is, compared to an unvegetated dunal system, a vegetated dunal system is better able to retain a greater volume of sediment, thus providing a greater level of protection during a coastal erosion event.

Therefore, the benefit of existing vegetation has already been considered in the model, as the cross sections used for the erosion modelling includes additional sand

that is retained within the sand dune and this additional volume of sand was incorporated within the beach profiles used in Council's modelling. "

- 1.13. *In reality, a substantial vegetated area remains as only a small distance of the barrier has been included in those cross sections. Such an approach has resulted in distances being significantly overstated. This outcome is reflected on the Storm Erosion Estimate Charts in the Technical Memorandum dated 17 December 2019.*
- 1.14. Firstly, if the aim is to identify the areas actually at potential risk of erosion, (which it surely should be) why is *"the impact of such vegetation is highly site specific and outside the scope of this investigation."*? This is an absurdity and as discussed above, results in a distorted result whereby potential hazards are substantially overstated.
- 1.15. Secondly, when the storm Erosion Estimate graphs are reviewed, for example in Part 1.7 of the most recent report, it is apparent that the profiles only consider a small proportion of the barrier landward of HAT, say 10 to 20 metres, when the vegetated dunal area range from a low of 32m at Sunshine to 172m at Peregian.
- 1.16. Without considering the existing vegetation the estimated erosion prone areas remain significantly overstated.
- 1.17. The report extracts below demonstrate this:

1.7 Storm Erosion Estimates

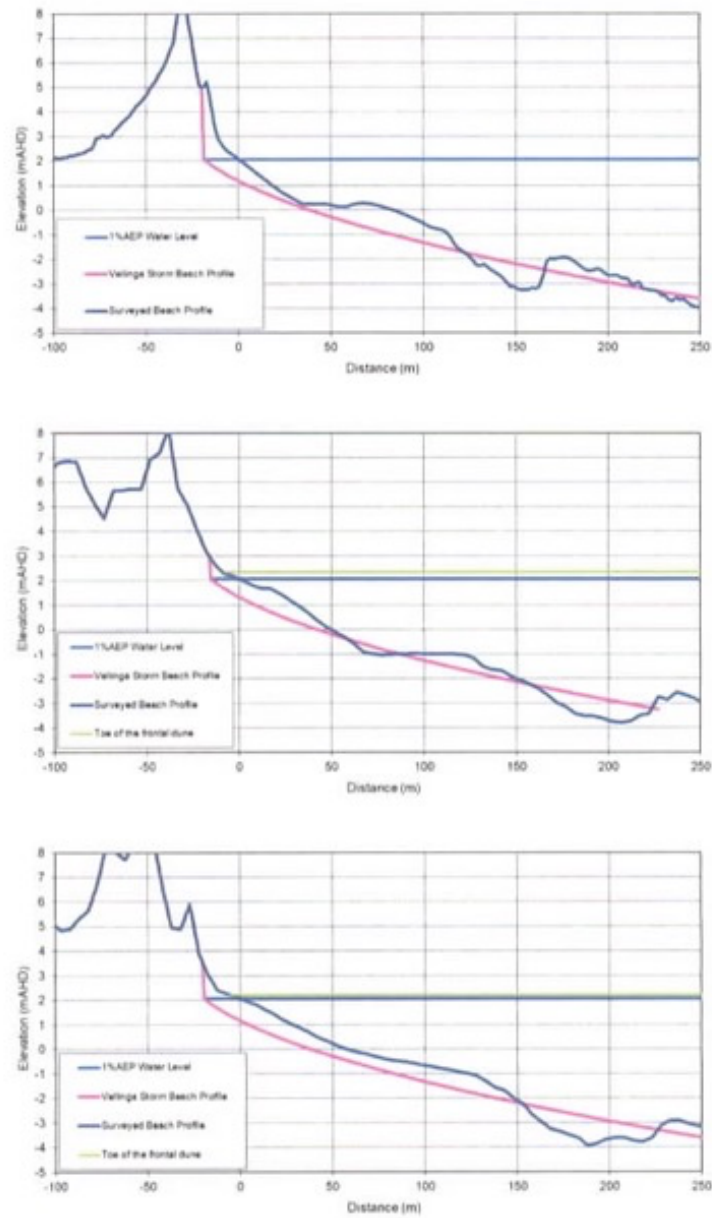


Figure 2 Storm Erosion Estimate: ETA 574 (top), ETA 578 (middle) and Peregian1 (bottom)

1.18. Aerial Photos from 2008 and 2019 at Tristania Ave, Marcus Beach and Lorikeet Drive, Peregrin Beach shown below, indicate there has been no erosion over this time; in fact, the opposite, there has been accretion.

Marcus Beach. 2008



Marcus Beach 2019



Lorikeet 2008



Lorikeet at 2019



1.19. It is also of concern that the CHAP does not include the technical studies and reports from which the CHAP is derived. It is essential that the studies and reports used are included for a number of reasons, not limited to:

- The CHAP is to be reviewed over time – an effective review will involve new studies and their comparison with the ones originally used – if the original ones are lost or not readily available then both subsequent Councils and the community will not be able to undertake an effective assessment nor make proper judgments.
- The CHAP will become an important document in development assessment and any associated court cases. The Council may want to justify the CHAP while the community may want to challenge it and consequently, the expert studies and reports must be readily available from both perspectives.
- The CHAP cannot be relied on without the source technical studies and reports.
- The community is denied the opportunity to provide effective and constructive feedback in the absence of relevant technical studies and reports.

1.20. Another glaring omission in the CHAP is that nowhere are the calculated EPA distances shown. These were in the Phase 3 report and also the Technical Memorandum. The EPA distances need to be properly disclosed and made readily available to the community for the reasons outlined in paragraph 1.19.

2. Inconsistent Treatment of Different Areas of the Shire

2.1. Another major error in the CHAP is that the CHAP erosion areas do not align with the Council's hazard mapping for various areas, as the CHAP areas include some properties not affected by the hazard mapping.

2.2. That is the case for Peregian and at the northern end of Sunshine, Marcus, and Castaways. A review should be undertaken to determine if that is the case for other areas of the coast so that those communities can be satisfied that the hazard mapping has been accurately used to set the CHAP erosion areas without any arbitrary (and consequently unreasonable and incorrect) decisions by Council.

2.3. The fact that there are long-term existing residential development areas in the Eastern Beaches which are in the Urban footprint of both the Planning Scheme and the SEQ Regional Plan, should be taken into account in the recommendations made in the CHAP. These areas deserve to be protected just as the CHAP acknowledges for Hastings Street and flood affected areas in Noosaville and Tewantin.

2.4. When considering what are appropriate physical protection measures, a natural response is desirable, if achievable in the circumstances faced by the Council, however, if a natural response is not achievable, physical measures are necessary, unless the Council determines that the particular assets be abandoned.

2.5. The draft CHAP asserts that buried rock walls are not effective to prevent or minimise erosion. But rock walls are currently used throughout Australia and all over the world, including for Noosa Main Beach. Many research papers, which have been provided to Council, support the use of buried rock walls as an economically viable alternative. For example:

- 2.5.1. 50 Years of Seawall and Nourishment Strategy Evolution on the Gold Coast - Leslie Angus Jackson and Rodger Tomlinson.
- 2.5.2. Rock seawall design and construction with deeper toes for climate change - Martin G Mulcahy, Leslie A Jackson, Bobbie B Corbett.
These are both Australian papers.
- 2.6. This strong assertion against the utility of rock walls in the draft CHAP could be described cynically as an attempt by the Council to avoid the cost of reasonable and necessary adaptation for the Eastern Beaches.
- 2.7. Council has many responsibilities to manage but when proposing outcomes and actions to protect the community and its assets', equitable considerations apply so that all parts of the community are treated reasonably, fairly, and rationally.
- 2.8. For Noosaville and Noosa Heads, also said to have "intolerable risks", the suggested adaptation from the CHAP is "one that **supports** existing recreational and visual amenity values, accessibility and infrastructure services, and **current levels of residential, commercial and retail development**".
- 2.9. For the Peregian it is "one that provides continuous support for natural coastal processes and existing beach use, amenity, and adjacent recreational values by implementing natural coastal protection solutions and a **medium- to long-term transition of built environment and recreational infrastructure away from high erosion risk areas**". Again conversely, for Sunshine Beach and Sunrise Beach, the preferred adaptation outcome is "**Avoid further urban development in high-risk beach erosion areas in order to mitigate the risks to people, property and the environment.**"
- 2.10. It is noted that the Council considers as a viable possible course of action building structures like levies in Noosaville. Council, it appears, has determined it is worth incurring expenditure to undertake protective works for part of the community but to take no meaningful steps for another. Indeed, even the steps proposed as assistance for the Eastern Beaches come with heavy caveats – no promises on beach nourishment as there might not be enough sand and no promises to even plant more vegetation due to bushfire concerns.
- 2.11. Encroaching on private property rights and abandoning properties in the Eastern Beaches while protecting Noosa Heads and Noosaville is far from a rational, reasonable and equitable preferred outcome for the Eastern Beaches community and sets a concerning precedent for treatment of the broader Noosa community. The Eastern Beaches community is full of long-term residents and is part of the broader Noosa Shire Community. It is entirely unacceptable that it be treated in such a different manner from the other parts of the community on the basis of a "cost benefit analysis". An inherent obligation of Council is to advocate for and protect its residents – not abandon them. If this is how Noosa Council intends to start treating its community, then we question the type of community the Council is seeking to foster.
- 2.12. We are supportive of Council taking protective steps to assist other parts of the community – but where is the assistance for our part of the community?
- 2.13. The Council should look closely at its responsibilities for the protection of properties within the Shire from natural hazards to ensure it is not exposing itself to financial risk.

2.14. The appropriate and reasonable adaptation outcome and starting point for all localities in the Noosa coastal zone is surely one which supports "current levels of residential, commercial and retail development".

3. Preventing Redevelopment and Enjoyment of Use in Existing Suburbs by Unnecessary Amendment of the Planning Scheme

3.1. The Council has formally notified the State that the Planning Scheme will be amended to address coastal hazards. This notification indicated that the amendments would be "adverse planning changes" – being amendments which reduce the value of affected properties.

3.2. Under the Queensland Planning Act 2016, adverse changes give rise to compensation obligations on Councils unless the change is necessary:

"to reduce a material risk of serious harm to persons or property on the premises from natural events or processes (bush fires, coastal erosion, flooding or landslides, for example) "

3.3. The test is a question of fact at the time the planning change is made. Specifically – is there a "material risk" at that testing time. The 2040, 2070 and 2100 estimates are well into the future, with the later two being 50 and 80 years away. They are based on modelling, extrapolation, and little actual empirical data. Their underlying premise – risk posed from climate change – is also a science that is still very much evolving and as is acknowledged by both the State and the Council – still subject to much uncertainty at this time. Further, the estimates are made using very conservative assumptions which are not relevant in determining if there is a material risk now.

3.4. We notify Council that we reject entirely any suggestion that the "material risk" exception to the obligation to pay compensation is available to Council in this matter. To suggest that a risk of something that may or may not manifest or that may manifest but in a far less deleterious manner, decades into the future would act as a trigger for or constitute a "material risk" now, is complete nonsense.

3.5. The level of uncertainty that exists with these potential future risks is significant. The community will suffer if successful compensation claims are made against the Council and as such the Council should adopt a far more cautious approach.

3.6. The Planning Scheme amendments will restrict, or even prohibit, development on the existing lots as the Council does not propose any protective works for this area. We contend (and affected residents may claim that) not doing necessary works is a dereliction of the Council's duty to ratepayers of that area.

3.7. Because of this it is important that the impact of planning scheme changes is considered.

3.8. The majority of the lots are in the Low-Density Residential zone (A few are in higher density residential zones) and are within the Urban area in the Planning Scheme and also on the State's Regional Planning Strategy. The State Planning Policy recognises that:

Land in an erosion prone area is not to be used for urban purposes, unless the land is located in:

- (a) an urban area in a planning scheme; or*
- (b) an urban footprint identified in a regional plan.*

3.9. In summary, the State's position is to continue the existing urban areas but to restrict future development in at risk coastal areas outside of these areas. This seems reasonable. That is not what the Council proposes. The Council has said, in correspondence to the State's Planning Department

" We do not see that it is necessary to have any further provisions that relate to the 2100 erosion prone area outside of the 2070 area. This will create confusion and does not add value in terms of preventing urban development in the high-risk erosion area."

3.10. What this seems to be saying is that the Council intends to prevent urban development in properties which are affected by the Hazard mapping in 2070. This is an extract from the Cost Benefit Analysis for Coastal Erosion Options (listed in the Council's CHAP Document Library):

"Under option 7, changes to planning regulations prevent development within the projected 2070 coastal erosion prone area. This leaves an estimated 66 properties, primarily within the suburbs of Sunshine and Sunrise Beaches, with lot sizes potentially too small to undertake any rebuilding after planning regulations are updated".

3.11. Council's approach here is "too much too far too early" and is entirely inappropriate as a response to a future potential risk at this time. A more prudent approach would be for Council to adopt the core tenants of the Q2100 program and build a framework or program to monitor, observe and collect data over the coming decades to understand and identify if and how potential future risks may manifest.

3.12. There is also deep concern in the community that the proposed changes to the Scheme clash directly with private property rights of the residents of the shire. It is not appropriate or lawful, for Council to extend public property principles and apply them to personal property with draconian regulations that purport to treat private property as de facto public land.

3.13. The Council is on notice of the potential for significant compensation claims by the residents of the Eastern Beaches community.

4. Properties to require Planning Scheme Approvals

4.1. The most recent mapping clearly demonstrates that the only potentially affected properties at Peregrine are Peregrine Park and some houses at the Southern end of the beach. All are minimally affected as at 2100. More accurate mapping is highly likely to show they are not actually affected so that no additional adaptation outcomes or actions are required.

- 4.2. At Marcus Beach, neither the car park nor any privately owned properties are affected. At Marcus Dunes privately owned properties are affected.
- 4.3. The Coastal Erosion mapping in the CHAP for Lorikeet Drive is dangerously misleading. It does not align to the hazard mapping on the Council's website. The CHAP maps show all houses on the Seaward side of Lorikeet Drive as Low risk now, at 2040 and 2070 and medium risk at 2100.
- 4.4. The hazard mapping, see the maps below, show that:
 - 4.4.1. All the properties north of number 70 are outside the hazard area even at 2100;
 - 4.4.2. The lots south of number 70 are not at potential risk until 2100 and then most are only affected by a few metres or even less.
 - 4.4.3. The properties north of number 70 should not be shown as being at potential risk on these plans in the CHAP for any of the time periods.
 - 4.4.4. The properties south of number 70 are, at most, only potentially affected by a few metres at 2100 with some affected minutely. It follows that the appropriate classification of the potential risk is Low – not medium.
- 4.5. For the earlier dates, when the mapping shows the lots are not affected, they should be shown as not at risk – not low risk.
- 4.6. In the Planning Scheme in its current form, and which the Coastal Hazards amendment is likely to adopt, there are many streets In Peregrin within the Coastal Protection and Scenic Amenity Overlay Area which are completely unaffected by the hazard mapping. These include Plover, Piper and Shearwater. The same applies for all of Marcus Beach, Marcus Dunes, Castaways, Sunrise and Sunshine Beaches.
- 4.7. Building or renovating a house will require planning approvals to address hazards yet the latest mapping shows them to be unaffected. It is completely inappropriate for the Planning Scheme to require approvals for these properties and in doing so, is a significant unjustified overreach of the Council's planning powers and is not necessary to protect against any rising sea level risks or other reasonable community interests.
- 4.8. The SPP is relevant to the making of the Council's proposed amendment; In particular, the Guiding Principles in Part C. Examples of relevant extracts from Part C are:
 - 4.8.1. Overlays should be compatible with and not operate either individually or cumulatively to prevent or restrict land from being used for the purpose for which it has been zoned. (This means that the amendment should not prohibit or severely restrict, by performance outcomes or otherwise, houses from being built or renovated in Residential zones)
 - 4.8.2. Plans regulate development only to the extent necessary to address potential impacts. When applied, plans adopt the lowest appropriate level of assessment required to efficiently and effectively address those impacts. (This means that the Overlay area should not include properties which are outside the hazard area because it is not necessary to regulate these to "address potential impacts")
- 4.9. This principle, that private properties unaffected by the correct hazard mapping should not require Planning approvals, should be adopted throughout the Noosa coastal zone. It is particularly disturbing to our community that Council is reaching outside of this principle – which is again unnecessary and inappropriate overreach.

- 4.10. If adverse planning scheme changes are made by Council, the Council will be responsible for compensation to affected owners. The only relief for Council would be if the change is made “to reduce a material risk of serious harm to persons or property on the premises from natural events or processes”. However, that relief will not be available to Council since, as discussed above, the material risk is one which is to be determined at the time the scheme is changed – not some time in the future.
- 4.11. Under the Planning Act 2016, the SPP is required to be integrated into the planning scheme – this means there should be no inconsistency between the scheme and the SPP. If the scheme amendments effectively stop development within the current urban footprint (shown in both the State Regional Plan and the Strategic Framework Maps from the Planning Scheme) there will be inconsistency because the SPP allows development in the urban footprint .

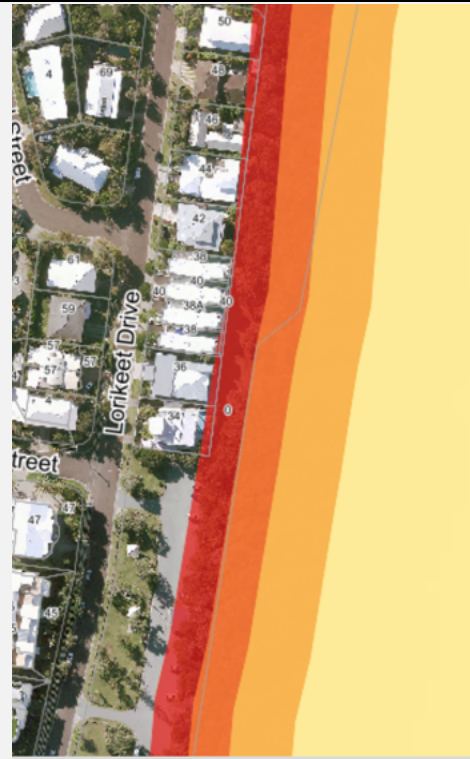
LORIKEET DRIVE HAZARD MAPS

(Please remember, when looking at these maps, that these show a hazard determined as if all property seaward of the red 2100 line is erodible sand!)

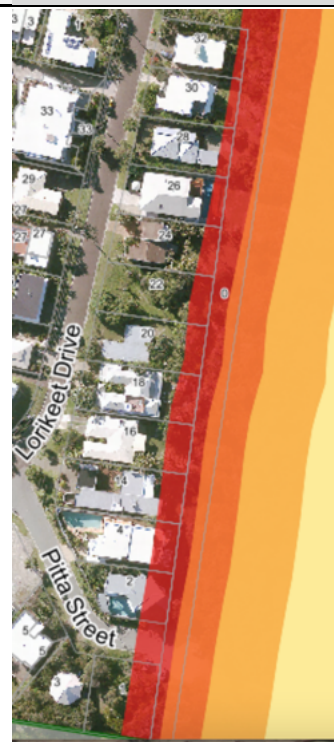
To Jabiru



To Victory Park



South Jabiru



To Pitta

The screen shots of part of the Peregrine Coastal Erosion Plan shows the properties in Lorikeet and Pitta which are “at low risk” in 2020 (the first plan) and at medium risk in 2100 (the second plan). All north of no. 70 are outside the 2100 hazard line and should not be included at all. Those south of no. 70 should not be included until 2100 and then shown a slow risk. (If the mapping is corrected these will not be at risk at all and should be excluded).





5. Land closest to the Beach is Controlled by Council

- 5.1. After potential Hazards are identified, the next step for a CHAP in order to determine appropriate recommendations, is to identify the assets on those lands that are potentially affected. Presently, draft Noosa CHAP concentrates primarily and illogically on privately owned land in the Eastern Beaches.
- 5.2. The community is fortunate that a significant vegetated buffer was planned and provided for when the subdivisional layout was put in place upwards of 50 years ago all along the coast. The Eastern Beaches are currently stable without erosion issues (other than from Council infrastructure as noted above) and this has been the situation for many years.
- 5.3. There are no privately owned properties immediately adjacent to the beach. This vegetated buffer land adjacent to the beach is under the control of the Council being State land for which the Council is trustee under the Land Act, or dedicated roads (Esplanades) which are unmade but also under the control of the Council.
- 5.4. The width of this "Council" land adjacent to the beach, varies. At mid-Plover Street it is 172m, at mid-Shearwater 140m; at Mid Lorikeet 96m; at mid Tristania 142m; at Marcus Dunes 147m; at Castaways 125m; at Tingira 71m; At SBSLSC 48m; at mid Arakoon 40m; and at lower Seaview the shortest at 32m.
- 5.5. This land is unlikely to be developed so the protection afforded by it is permanent.
- 5.6. Aerial photos from 1961 show the buffer covered with low, sparse vegetation. This vegetated dune buffer has since extended and become lush and abundant, featuring a range of larger trees and shrubs. This has occurred naturally and in symbiotic relationship with the built environment.
- 5.7. As trustee of the land, Council has various obligations including:
"The trustee must maintain and manage the land in a manner that is consistent with achieving the purpose of the trust land. They must comply with any conditions associated with their appointment as well as the following requirements. Land management and maintenance, only use the land in a manner consistent with the purpose of the trust land, unless our approval has been obtained. Control pest plants and animals. Exercise a duty of care for the land, including protecting and maintaining any improvements. Obtain a vegetation clearing permit before destroying any vegetation. Comply with any directions issued by the Minister or chief executive and complete management plans as requested."
- 5.8. We submit that Council has a positive duty to take steps to protect this public land along the entire length of the Eastern Beaches. If the Council recognised and discharged its community responsibility to protect the beaches and its reserve land, then privately owned homes and properties would, by default, also be protected.
- 5.9. We have been unable to locate any clear or meaningful statement or plan in the Noosa CHAP where the Council proposes even relatively straight forward adaptation measures to protect these lands under Council control.
- 5.10. The Council does say, in relation to Sunshine Beach, a measure is to *"Investigate options of managed alignment of coastal creeks and other natural drainage locations where creeks consistently erode incipient dunes"*.

- 5.11. The carpark and beach access at Seaview and stormwater and treated sewage drainage at Burgess Creek, stormwater drainage under Tingira Crescent (causing the road to collapse on two occasions) and at Adams Street, are the major current sources of beach erosion, which is presumably known to Council.
- 5.12. The Council controls and is responsible for these natural assets and sewage and stormwater infrastructure and is the only entity able to carry out protective works.
- 5.13. Why does the Council not commit clearly in the CHAP that it will undertake works to minimise erosion from these sources, rather than merely “investigate options”, which may come to nothing, and focus its adaptation outcomes and actions primarily on private property?
- 5.14. If the Council does not actively plan and prioritise the adaptation of these Council assets to protect them from projected hazards and consequently, private properties are adversely affected, a serious liability issue must arise for the Council and the community.

6. Council has Published Coastal Hazard layers on the Interactive Maps that are Confusing and Potentially Misleading

- 6.1. The existing interactive mapping on the Council website for coastal hazards is of extreme concern for Eastern Beaches residents. When it is viewed in its current state it creates fear and does not accurately communicate what Council is attempting to indicate. The lines on the erosion hazard map in particular have this effect. In the "Coastal Hazard" tab, the second item is simply “Erosion Prone Area” with the current period and then encroachment lines for 2040, 2070 and 2100. The colours move from a sand colour to red – a colour that we are hardwired indicates danger.
- 6.2. There is no disclaimer or explanatory text box on the Map that appropriately deals with what the map sets out.
- 6.3. Explanatory wording is provided on the maps landing page. However, it uses language and conveys a tone that indicates these events are likely rather than future possibilities; for example:

“Council has prepared coastal hazard mapping for areas affected by storm tide inundation, sea level rise and coastal erosion”; and

- 6.4. Whilst the landing page does attempt to convey the purpose of the maps; for example:

“The coastal hazard mapping shows areas at risk of erosion for a modelled storm event (a ‘major’ storm with a 1% probability of occurring in any given year, otherwise referred to as a 1-in-100 year event), plus sea level rise for years 2040, 2070 and 2100.”

We would submit it does not do so effectively – particularly in light of the tone set by the initial paragraph. Whilst Council may see this as semantics, we submit it is critical. There must be no misapprehension at all as to what these maps show and Council should be making dedicated effort to ensure it is crystal clear. We would also submit that landing pages are not an effective tool to communicate what the maps show as most people disregard them and proceed straight to the maps. A pop-up text warning box would be far more effective.

- 6.5. When the mapping tool is used, only the third new item of storm inundation notes it relates to a 1 in 100 year event, despite this being applicable and critical to the erosion tab.
- 6.6. The maps give a very dramatic exaggerated impression of the potential consequences of a 1 in 100 year possible event. They imply an “erosion cliff-face” at these dates – the fact that the lead project officer felt the need to state that this is “what the maps do not show” of his own volition and completely unprompted when asked to explain the maps, demonstrates the natural manner that the mind interprets the maps as currently conveyed.
- 6.7. The current maps and their explanation create a very real risk of confusion and being misinterpreted in an adverse manner. They must have a concise explanation of what they show – the potential erosion impact that may occur in the event of a 1 in 100 storm event occurring in conjunction with a tidal event in conjunction with projected possible sea level rises.
- 6.8. It must be made clear that the maps do not represent “erosion cliff faces.”

7. The Whole Tenor and Tone of the CHAP is Very Different from Council’s Expert Reports

- 7.1. We understand that the Government and community desires that climate change be addressed and potential risks identified and planned for. Our concern is with how this is being done by Council.
- 7.2. We believe the response from Council reflected in the CHAP to these “potential” risks is couched in language that is inappropriately definitive for risks that may or may not even occur.
- 7.3. The language in the CHAP and its overall tenor is considerably stronger than that of the Council’s experts – the experts use, far more regularly, appropriate terminology such as “potential”. Council, concerningly, uses the word “likely” very often. How can Council justify this when its own risk assessment has concluded that these events are “unlikely”?
- 7.4. The following are examples of wording from the Executive Summary section of the CHAP:
- 7.5.

“It is likely that many natural hazard risks will worsen, and some new ones may emerge, as a result of climate change.”

“The QCoast2100 initiative has been designed to assist Queensland coastal local governments with funding and technical guidance to support the preparation of plans that identify and respond to likely changes in coastal hazard risks caused by rising sea levels.”

“These studies reveal Noosa should expect negative impacts to increase as a result of a range of coastal hazards, particularly towards the latter half of this century, and that proactive and well considered actions are required to prepare and manage these risks”

“Specifically, these technical studies reveal that without an appropriate response, increasing impacts from coastal erosion are likely for the open coast areas (i.e. Peregrin Beach to Sunshine Beach, Noosa Heads, and Noosa North Shore), having a high impact particularly on privately owned assets and some Council infrastructure (e.g. roads and recreational areas), as well as the beaches themselves.”

This wording appears in Section 1 Introduction:

“This plan specifically deals with the likely impacts of coastal erosion along the open beach areas and inundation of low-lying areas from storm tides and higher tides, and how these existing hazards are likely to change over time due to sea level rise.”

“Therefore, close attention is required to any effect climate change – particularly sea level rise – is likely to have in worsening risks associated with these existing hazards.”

This wording appears in section 4 of the CHAP:

“However, due to sea level rise a trend of continuous, gradual erosion of sand from the beach resulting in long-term shoreline recession is expected. Development and other disturbance of the natural dune system by human activities increases the erosion potential by interrupting the natural beach and coastal processes of erosion and sand replenishment. Therefore, eroded coastlines will increasingly fail to rebuild fully following extreme events, increasingly the likelihood of permanent loss of beach areas and dunes if appropriate adaptation measures are not undertaken.”

- 7.6. This is very concerning and harmful as it creates a perception in the mind of the reader that exaggerates the likelihood of risks that are only potential or that may possibly happen in the distant future – the benchmark being an event that has a 1% chance of occurring in any given year **IF** a number of very unlikely factors all occur together.
- 7.7. It is completely inappropriate when considering risks that may or may not manifest or may manifest in a more harmless fashion, anywhere from 20 to 80 years into the future. Whilst Council must work to identify potential future risks and plan for how to assess and monitor them, it must do so in a responsible manner – reflecting the highly uncertain nature of what is being dealt with.

8. Consultation by the Council has been Completely Inadequate

- 8.1. Council claims to have undertaken extensive community consultation for this project which has been in progress for at least 3 years. It has conducted pop-up events, on-line and personal surveys etc.
- 8.2. However, the first direct communication to Eastern Beach residents who will be affected by Council's CHAP was in February this year. This was indeed the first many of these residents had ever heard of this project. In light of how Council likes to portray itself as open and having excellent community consultation, the efforts on consultation for this project have been woefully inadequate to say the least. Indeed, it reflects an administrative tick box approach rather than genuine consultation.

- 8.3. Council goes to great pains to advise how important this project is, yet it only reaches out meaningfully to the community directly affected by it at the “eleventh hour” and provides only an initial 4 week period to digest hundreds of pages of complex technical material and provide submissions.
- 8.4. On being challenged on this and seeking an extension, an overwhelmingly disappointing 2 extra weeks was granted. Council claims this is due to State Government deadlines. If Council had engaged meaningfully and regularly with the Eastern Beaches community significantly earlier and genuinely made the community part of this project, this would have been avoided.
- 8.5. The following are extracts from Section 1 Introduction of the CHAP regarding Councils intended consultation for the CHAP project:

“Consult with the community clearly and sensitively throughout key stages of the project so the community understands the implications and contributes to the decision making;”

“Council believes that the responsibility for responding to the causes and risks associated with climate change is shared by many stakeholders and thus requires a collaborative approach. Council acknowledges its responsibility to understand and consider local risks, and to work with the community, government agencies and other partners to improve its knowledge and capability to respond.”

The members of this community do not feel that this consultation has happened at all. If it had been undertaken in this manner, it is far more likely that a CHAP and mapping etc far more reflective of community concerns would have been developed and importantly, a framework for monitoring and gathering information for assessing future risks could have been built.

- 8.6. Given the drastic impact this project will have on people’s homes, this is completely unacceptable.

9. Council’s Risk Assessment Process Is Focused on Future “Possible” Events but Fails Completely to Address the possibility of These Events Not Occurring in the Manner Predicted and the Risk Council Faces from Liability to Private Property Owners

- 9.1. Council faces the real and material prospect of claims from owners and residents of premises in the Noosa coastal zone, including the Eastern Beaches, either individually or through class action, and having to pay compensation arising from the proposed adverse planning changes that will encroach on vested property rights and impact on the value and insurability of residents’ and owners’ homes, premises and assets.
- 9.2. There is no rational justification for Council to assume that it has the jurisdiction and power to take unprecedented action that causes harm today to residents and premises, based on an extremely uncertain, incomplete and fragmentary understanding today of what might happen decades in the future, as both Council and the State acknowledge.

- 9.3. Council's proposed CHAP and attendant courses of action and adverse planning changes will affect many people drastically in terms of adversely impacting the use, enjoyment, value and insurability of their homes, premises, and other assets. They will also affect many residents in related ways eg: many residents also have local businesses which serve the eastern beaches and broader Noosa community and have their supporting debt secured to their premises. If the property value is reduced through Council's proposed CHAP and planning changes, the LVR will be triggered and lenders may withdraw their support. This could be disastrous for the business owners, the people they employ and the community.
- 9.4. Council should be in no doubt that its proposed CHAP and preferred adaptation outcomes and actions have the very real potential to cause disastrous falls in premises values and insurability in the Noosa coastal zone, including the Eastern Beaches and if this occurs residents and owners will seek compensation from Council.

10. These are People Homes

- 10.1. What Council is doing is affecting people's homes – many of whom are long term residents. It is also causing considerable angst, fear and emotional distress for the Eastern Beaches community and, increasingly as awareness spreads, to the broader Noosa community.
- 10.2. We submit with respect that Council should adopt a more reasonable, rational and logical approach, focusing on observing over time, collecting data and evaluating, so that Council is dealing with real issues, rather than hypothetical issues, around the actual impact of global warming and sea level rise on the eastern beaches, rather than pre-emptively changing the planning scheme and encroaching on fundamental rights to residents' homes and premises.

11. Conclusions

- 11.1. We respectfully submit that the draft CHAP has many faults and is inappropriate in its present form to guide Council's decisions about protective works or Planning Scheme amendments (which themselves should not be being considered at this early juncture).
- 11.2. The project (at least 3 years in duration so far) has been completed without reasonable, meaningful and proper community consultation - especially consultation with home and property owners whose fundamental private property rights are directly encroached upon by Council's draft CHAP.
- 11.3. We respectfully submit Council should not approve this draft CHAP, and instead insist on closer review of the reasonableness and logic of the assumptions and context relied on in the studies from which this draft CHAP is derived.
- 11.4. It is essential to take proper account of the dunes and beaches in their current condition. Likewise, Council must gain a far better understanding of the limitations of the studies used and of the probabilities, forecasts and policy recommendations that can properly be derived from them, before making any decisions founded on them. To finalise the existing CHAP without having regard to these issues would be reckless.

11.5. We respectfully submit that, in deciding on this draft CHAP, Council should consider carefully:

- the limits of its powers and responsibilities;
- the rational justification for the burden this CHAP would impose on private home and property owners; and
- the reality of the potential financial liabilities the Council would be exposed to in making adverse planning amendments that reduce the value and insurability of the homes and properties of multiple residents in the Noosa coastal zone.

11.6. A far more effective approach in respect of the CHAP, is the adoption of measures to monitor, understand and gather data and protect the dunes and beaches without exposing Council to serious liability, which would dilute the resources of the Council that could be otherwise be applied to reasonable and rational adaptation measures along with other community services ordinarily provided by Council.

NOTE

These submissions have been made in the short time available and in response to the Noosa Shire Council's request for comment on the proposed CHAP. Whilst every effort has been made to ensure that these submissions are as detailed and encompassing of important issues as possible, they should not be considered to be an exhaustive or complete list of complaints or matters and the absence of any matter/issue or failure of it to be included in these submissions should not be considered to be a waiver either express or implied by either the Eastern Beaches Protection Association (and any successor, assign, subsequent or alternate future replacement representative body) (the "EB Association") or its members of such matter/issues. Both the EB Association and its members individually, reserve their rights to raise any additional matters/issues relating to the proposed CHAP, any Planning Scheme amendments related to the CHAP, any document or matter relating to the CHAP or any amendment to the Planning Scheme, or any matter or action relating to the Coastal Hazards Adaption Program for the Noosa Shire (in whole or part) being conducted directly or indirectly by the Noosa Shire Council, the State of Queensland or any other body or entity.

The EB Association and its members individually, reserve all their rights of any kind (including legal and equitable) to take any lawful action of any kind against the Noosa Shire Council, State of Queensland or any other relevant body or person, including but not limited to in relation to the proposed CHAP, any Planning Scheme amendments related to the CHAP, any document or matter relating to the CHAP or any amendment to the Planning Scheme, or any matter or action relating to the Coastal Hazards Adaption Program for the Noosa Shire (in whole or part) being conducted directly or indirectly by the Noosa Shire Council, the State of Queensland or any other body or entity. Nothing in these submissions or the absence of any material or matters in these submissions should be construed as a waiver, express or implied, of any lawful right of the EB Association or its members individually.