

The key here is the NSW Government Coastal Dune Management Manual (from hereon referred to as the Manual). In the first instance it is important to point out Collingwood Beach consists of an incipient dune and foredune with the hind dune now occupied by houses. The Manual states trees (and makes specific reference to banksia trees in that regard) are only suitable for hind dunes.

The reason is obvious and supported by historical evidence at Collingwood Beach. In the 1974 storm there are eye witness accounts (which have been provided to Council) that the storm washed away trees and used them as battering rams to demolish the beach.

The existing trees were planted by self interest groups around 1993 contrary to the dune vegetation plan developed by the Department of Conservation and Land Management Nowra on behalf of Council, and circulated to the community in a information pamphlet at the time. The pamphlet stated, and I quote "the shrubs now being planted on the dunes and adjoining areas are low growing varieties which will not obstruct people's views".

Views of Jervis Bay are what the community and tourists want to see. The current coastal walkway was relocated from Elizabeth Drive to the beach front because of community protest.

People state the trees are necessary to stabilise the dunes however the Manual tells us this is not the case for incipient dunes and foredunes. Trees cannot resist constant wave action. This is a fact expressly stated in several government publications such as the publications from the Queensland Environmental Protection Authority and Beach Protection Authority and confirmed by Council's Environmental Services Manager to Councillors in an email back in December 2015.

The consultant's previous proposal for the Dune Management Plan went some way towards achieving compliance with the Manual by reducing the number of trees. Trees will fall in a future major storm, they then batter and demolish the beach.

The CBPG (hereon called "Group") proposal goes further and is more aligned with the intent of the Manual. To the knowledge of the Group there was only one submission by an expert in relation to the previous draft Dune Vegetation Management Plan.

That submission was made by Dr Howard Brady an eminent scientist who stated that trees planted on Collingwood Beach do not belong in that ecosystem and actually destabilise discrete areas. His submission further states that the Group submission is heading in the right direction although his preference would be to remove high trees completely and plant additional low lying dune vegetation to strengthen the dune system.

It should not be forgotten that on 17 November 2016 the New South Wales Legislative Council unanimously passed a motion put forward by the Hon. Paul Green in relation to Council's proposed draft Dune Management Plan and Group amendments stating that the prime purpose is to secure views from the shared cycleway across the 1.5 kilometre beachfront.

Council staff for reasons only known to themselves have recently recommended that a Coastal Hazard expert review the proposed Dune Management Plan. Having managed the development of the plan for nearly two years and having exhibited the plan one would have thought that the need to involve an expert would have become apparent much earlier.

It is puzzling why an opinion is being sought as the Coastal Hazard Management Plan adopted by Council at the recommendation of Council staff already addresses dune vegetation at Collingwood Beach. The plan states with regard to Collingwood Beach:

"Select and maintain coastal vegetation to protect coastal views, stabilise the dune surface, provide habitat for small birds and other species and provide shade at key locations for coastal pathway users. After major storms scrape sand from the lower beach face of Collingwood Beach to reinforce the toe of the eroded dune scarp."

Subsequently correspondence from the consultants in response to community consultation stated:

“A diverse array of groundcover and shrub species is critical – to maintain ground cover, to trap sand and to provide a visual buffer. Tree species are not essential for these functions, but could add diversity. I would not want to see all the vegetation a uniform height, but neither do I think that dense stands of tall shrubs or small trees extending along the dune crest (such as Banksia integrifolia) are the best species for a narrow dune crest in an urban area”.

The consultant who developed the Coastal Hazard Management Plan was against dense stands of tall shrubs and small trees. However the situation at some locations along Collingwood Beach would be the consultant’s worst nightmare. It is estimated that between the beach access way at Susan Street, and 50m north of the access way there are approximately 100 banksia trees, all of which will grow to in excess of 15m and ultimately implode due to the density of the trees, thus destroying the dunes. The situation is so bad that one property on the beach is now classified as being in a bushfire prone zone.

In context of dune vegetation management it should not be forgotten that Collingwood Beach is an accreting beach, that is sand is deposited on the back on the beach after a storm event thus providing a buffer against the next storm event. This is in addition to sand trapped by low growth vegetation.

Survey measurements by the Group (which have been provided to Council) show this with the edge of the dune vegetation now 8m further seaward of what was the Mean High Water Mark on the original subdivision built in the 1950s.

The Group’s surveyor has referenced historical records and calculated that between the 1974 and November 2016 some 93,165 cubic metres of sand have been deposited on the beach, this being significant with the June 2016 East Coast storm event taking place in the interim. More recent measurements show between 21 November 2016 and 29 January 2017 a total of 13,320 cubic metres of sand was deposited on the beach.

Finally, the scourge of Collingwood Beach I am sure you will all agree is the vandalism of their vegetation. Despite best efforts Council has not been able to stop the vandalism. The Group proposal is the only proposal that has any chance of achieving what was stated to be the primary objective of the new Dune Management Plan, namely stopping vandalism.

The Group takes great pride in the work that it does to protect the integrity of Collingwood Beach and the technical expertise of its members that allows the Group to analyse all proposals put forward by Council staff and their consultants on a scientific and engineering basis.

The Group welcomes open and informed discussions on the best means to maintain the resilience of the dunes however statements made by some members of the public that contradict the CBPG proposal have not been supported by any scientific evidence and cannot be taken at face value.

The primary concern from government authorities (actually expressed in open correspondence) and Council staff is that any major clearing works will set a precedent and affect the budget bottom line. The health of the dunes is however more important than the budget bottom line.

A link to an illustrative explanation of the Collingwood Dune System is:

<http://www.collingwoodbeachpreservation.com.au/>

Thank you for your attention.

I move this “understanding of the Collingwood Beach dune system” be attached to the minutes.