

BEFORE AND AFTER AT 1A SUSAN STREET VINCENTIA

APRIL 2015





BEFORE AND AFTER AT 92 ELIZABETH DRIVE VINCENTIA





BEFORE AND AFTER AT 55 ILLFRACOMBE AVENUE VINCENTIA



ARE YOU AWARE OF THE IMPORTANCE OF SAND DUNES?

The sand dunes of Collingwood, Crion and Nelson Beaches are fragile environments that are constantly under stress from human interference and natural forces.

The dunes and their vegetation are very precious. They restrict wave and wind erosion, sea intrusion, salt spray and sand drift into areas behind beaches including homes and roads; they supply sand to the beaches; act as a buffer to wave attack; and they provide a transition from marine to terrestrial environments.

The dunes and their vegetation are a vital part of beaches. Vegetation deflects wind, traps sand and holds it in place. This then promotes dune growth and dune reformation following storms (Figure 1A). Vegetated dunes are vital to reduce wind erosion. Without them your beach and property are in danger from sand-drift and storm damage (Figure 1B). The dunes are a part of the natural beauty of Jervis Bay and they desperately need to be protected from human interference.

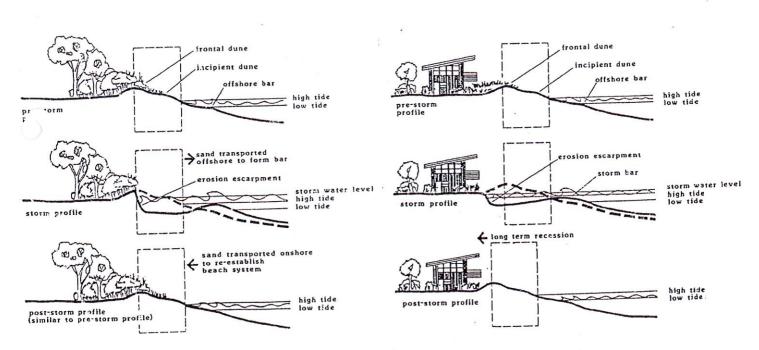


Figure 1A (left): Stable vegetated dune. Figure 1B (right): Unstable dune without vegetation

Damage to Sand Dunes and Their Vegetation

A number of actions can damage our sand dunes. Some of these are natural; others are caused by people. The dunes of Collingwood, Orion and Nelson Beaches are being damaged by the following human activities which are placing these beaches under high erosion threat.

- * Destruction and removal of trees including cutting branches and poisoning, to obtain a better view or gain easy access to the beach (Figure 2).
- * Walking through fenced areas rather than using designated access tracks.
- * Destruction of vegetation by fire and the collecting of firewood.
- * Dumping of rubbish, including garden waste such as grass clippings and prunings on the dunes and surrounding land.
- * Destruction of signs.

These activities are contrary to the community's use of the beach. They also violate Council and State Government legislation aimed at protecting dunes and their vegetation. It is an offence under the Crown Lands Act, 1989 to interfere with dunes and their vegetation. Residents are urged to report any damage to the Council Ranger on 293111 BH or 213100 AH.

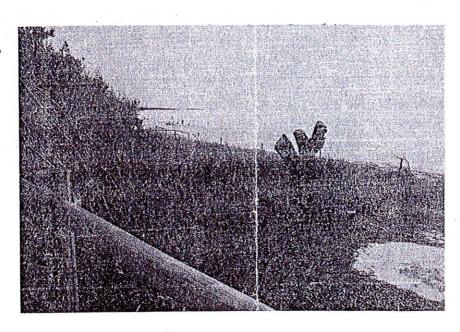


Figure 2: The destruction of trees on the dunes of Nelson Beach, 1993.

Collingwood Beach Restoration Work

In 1974, strong storms severely eroded Collingwood Beach, damaging already stressed dune vegetation (Figure 3). Following the storms, wave action gradually returned sand to the beach. However, without protective vegetation the sand drifted inland. Apart from the nuisance of sand drifting into private homes and yards and on to roads (Figure 4A), the most serious result was the inability of the sand to reform dunes. This placed private and public land at risk of damage by erosive storms.

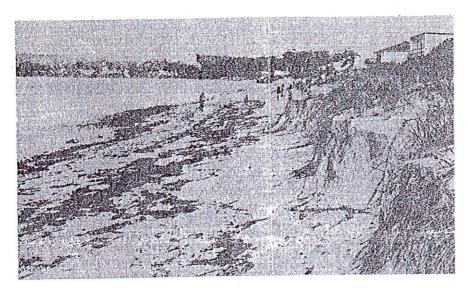
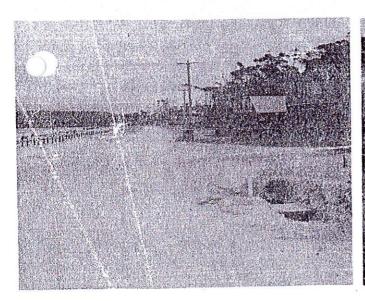


Figure 3: Storm action at the southern end of Collingwood Beach, 1977.



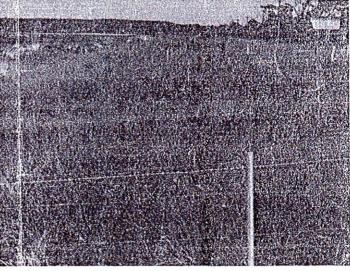


Figure 4A: (Left) Active sand drift in March 1978 along Ilfracombe Avenue. Figure 4B: (Right) The same area after completion of restoration works.

In 1978, Shoalhaven Council and the Soil Conservation Service commenced a dune restoration project along the beach. This project involved reforming the dunes, fencing, providing stable access tracks and planting marram and spinifex grasses. The local community assisted with the restoration and follow-up maintenance works, including planting over 2500 trees, replanting grasses and applying fertiliser.

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The immediate benefit of the restoration works was that sand drift was controlled and the potential for further sand drift reduced (Figure 4B). The long term benefit was that the beach was restored to a condition where it could and would continue to withstand public usage and natural forces without substantial deterioration.

Protecting Our Beaches. We Must Care.

The cooperation of local residents and beach users is required to maintain stable dunes along Collingwood, Orion and Nelson Beaches. The destruction of the dunes and vegetation which occurred in the past should not be repeated.

There are many ways that you can help look after our beaches.

- * Leave branches and plants on the dunes instead of cutting, poisoning and burning them. The shrups now being planted on the dunes and adjoining areas are low growing varieties which will not obstruct people's view.
- * Do not interfere with fencing and fenced areas and always use provided walkways and access tracks. This will protect vegetation cover in fenced and other areas.
- * Take notice of all signs on and around beaches.
- * Collect your rubbish and "Do the Right Thing" for Australia.
- * Join a Dunecare or Landcare group or form your own group and take an active role in caring for our beaches and surrounding areas.
- * Report any damage of the Cunes and their vegetation to the Ranger.

This publication has been produced by the Collingwood Beach Dunecare Group, Vincentia Ratepayers and Residents Association Inc. and Department of Conservation and Land Management, Nowra.



NEWSLETTER

Issue 2 July 2016

Aerial view of Collingwood Beach Photo Credit: Mark Fleming

VRRA General Meeting June 16 2016

An interesting meeting was had as the three Federal Candidates for the recently held Federal Elections attended to provide a brief Q & A, Ann Sudmalis (Liberal), Fiona Phillips (Labour) and Carmel McCallum (Greens). We were also pleased to have Mayor Joanna Gash, and Councillors Jemma Tribe and Patricia White in attendance. Local issues were the main interest with questions on business, infrastructure, higher and tertiary education, communications such as the NBN and funding availability. Questions also diverged onto singular issues such as euthanasia, registration of wills, treatment of refugees and asylum seekers, authentication when voting and the problems of double voting.

Our thanks to all three candidates and congratulations to Ann Sudmalis on her election win.



From Our Last Issue

Garbage Bins: Council have restored the removed garbage bins along the cycleway on Collingwood Beach between Church and Ilfracombe street. A rewarding experience of the community and Council working together.

Wool Road Bicycle Path: Council were quick to respond to the drainage and water run off issues that were raised. As a temporary solution the foliage was cut back and a shallow trench dug along the side of the footpath/cycleway. It was soon put to the test with the heavy rainfall and storms over the weekend of June 4. Bob Proudfoot commented at the last VRRA general meeting that, although a temporary solution, the work done by Council made a significant difference to drainage and pooling, he thanked our President for his initiative and Council for responding.





Vincentia Village: It's exciting times in Vincentia for shoppers, not only because of the new Vincentia Marketplace shopping complex but also because of the community "buzz" around the original shopping village in the heart of Vincentia. Recently a small grant from Council has enabled a facelift with new signs and brighter colours. Stocklands are improving the carpark and shopkeepers are gearing up with new offers and initiatives. Watch out for the new Vincentia Village Business Directory which is due out soon. A vast array of shops and professional services are listed.

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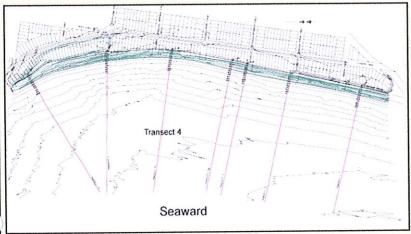
Collingwood Beach Preservation Group (CBPG)

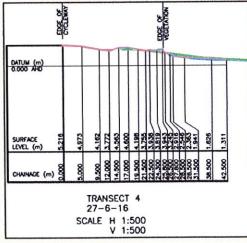
For over 10 years the owners along Collingwood Beach have been interested in the progress of the Coastal Zone Management Plan and formalised their interest 2 years ago by requesting recognition of the CBPG under the Council's new Community Engagement Policy. Among its members are engineers and scientists. Other members can trace their association with Collingwood Beach back to the dune restoration program of 1978 following the 1974 storms - they are are able to recite a full history of the dunes and the evolvement of the vegetation that exists today. Recently the

group has been attacked and maligned for advocating vegetation that allows views of Jervis Bay. A position they claim is scientifically founded and conforms with the Dune Vegetation Manuals published by the NSW and QLD State Governments.

What is less publicised however is the scientific work they have undertaken to monitor and measure the dunes. Wanting to better understand the Collingwood Beach coastline and the science of the dunes they engaged Emeritus Professor Roger McClean to share his knowledge and experience in coastal geography. Professor McClean is internationally recognised for his work in the geomorphology of coastlines and along with Al Gore is a joint recipient of the 2007 Nobel Peace Prize being one of the colleagues comprising the Intergovernmental Panel of Climate Change (IPCC) scientists. Professor McClean spent a day with members of the CBPG setting up the equipment and explaining the methodology in taking dune measurements.







Subsequently the group approached Council and obtained a topographic survey map of Collingwood Beach in a format that could be read by AUTOCAD which is a leading computer aided design software program. They then invested in a self levelling laser level and proceeded to take measurements. The method involves dividing Collingwood Beach into 7 transect locations. At each location the laser level is set up and at approximately 20 chainage positions seaward, laser readings

SURVEY LEGEND

AUG 2015
SEPT/OCT 2015
MARCH 2016
JUNE 2016

are taken. The readings are then entered into the AUTOCAD software and plotted to produce a dune profile. A copy of the readings are also submitted to Council. The latest measurements taken in June 2016 are reproduced above. For illustration purposes only one transect is shown.

Although it's still early days, the measurements so far indicate that Collingwood Beach is an accreting beach, a very important factor in the erosion and accreting cycle of a beach. This augers well for Collingwood Beach as it suggests that Collingwood Beach should naturally repair itself following any storm damage. To quote Professor McClean after reviewing early measurements, "I do think an interesting story will emerge from your surveys and at sometime you might suggest to SCC that a presentation - say to the Annual NSW Coastal Conference - be considered. That [is] to demonstrate both technique and results".

CBPG Deputation 19 July 2016

Mayor Gash, Councillors and General Manager

Thank you for allowing me to present on behalf of the Collingwood Beach Preservation Group

The Collingwood Beach Preservation Group believes there is no reason for delaying the commencement of the demonstration site. Council has undertaken a community consultation process which has provided ample opportunity for various interests groups to have an input into the development of the Dune Vegetation Management Plan. Further, the draft Plan has been endorsed by Council staff.

The motion before you today is the result of some interest groups trying to circumvent due process. If those interests groups are not happy with the draft Plan, there will be ample opportunity for them to state their views during the exhibition period.

The puzzling point though is that based on the presentation made to Council at its meeting of 24th May, those interest groups putting forward this motion had no objection to the Zone 4 vegetation proposal which includes the demonstration site. There is no certainty as to what the final product will look like, and as such it is essential that the demonstration site proceed as soon as possible so that an informed discussion can take place.

It has been disappointing for our group to see the recent misinformation spread in the media about the consequences of touching trees on the dunes. This information has undoubtedly resulted in a biased outcome to the current survey being conducted under the banner of Save Collingwood Beach.

There was a statement made in the Ulladulla Times on 21st June that:

Umwelt consultants identified Collingwood Beach to the council in its mapping of vulnerable areas.

The Umwelt report referenced is the draft Coastal Zone Management Plan for the Shoalhaven Coastline. The Action Plan for Collingwood Beach in the report actually states:

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.

Those of us that have been on this journey for many years will recall the Question & Answer from the session held at Vincentia High School on 14 November 2007 by the Umwelt Project Director. The Project Director 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.

Of course the newcomers who have jumped on the bandwagon in recent times have no knowledge of what has gone on beforehand. There is nothing inconsistent with what is stated in the Umwelt report and what is proposed in the draft Plan

Another statement made in the petition was:

After recent extreme weather and wild seas, many signatories are concerned at the consequences of reducing dune vegetation.

The draft Plan does not propose the removal of masses of vegetation. In fact where there are currently dead trees those trees will be replaced with new shrubs. The historical evidence is that the grasses on the dunes have withstood recent and past storms. The erosion has not even come close to where the trees have been planted, and if it did, the trees would have simply collapsed into the sea.

The statements in the press have been made without any reference to the science associated with dune management and are alarmist in nature. Many people reading these statements would on the face value of what was said be naturally concerned. It is therefore certain that the survey response is biased by the commentary in the media, at least in part, and as such is flawed and cannot be given any serious consideration.

The facts are that Collingwood Beach is an accreting beach, which means that sand is gradually deposited back onto the beach after storm erosion. Our group has established a survey monitoring programme which confirms that the beach is growing in width.

The planting proposal for a beach with no permanent sand loss (accreting beach) documented in the NSW Coastal Dune Management Manual does not include any trees. It follows that the pruning or removal of some trees will not result in a catastrophic collapse of the dunes.

Finally, there is the red herring about the Native Vegetation Act. The Statement of Environmental Effects prepared for Council in 1999 for the coastal walkway stated that the Native Vegetation Act did not apply because of the exemption under the Act for an area zoned as 'village'. Although the advice was based on the 1997 Act the current 2003 Act has exactly the same wording.

In summary, nobody has a greater vested interest in maintaining a resilient dune system than members of the CBPG. We have been researching the science robustly using subject matter experts within our group. It is our view that there is no reason why the demonstration site cannot proceed. We have been on this journey for many years and want to see it come to an end where all parties are satisfied with the outcome.

Accordingly, we request that Councillors vote to reject the proposal to delay commencement of the demonstration site and not consider the petition and preliminary comments at this time. It would be a denial of natural justice to those opposed to the content who have relied on Council's publicised process of seeking comments once the Dune Vegetation Management Plan is placed on exhibition.

Thank you taking the time to listen to me.

Minutes of the Strategy and Assets Committee -14 June 2016 - Page 10 Confirmed Tuesday 19 July 2016 - Chairman

NOTICES OF MOTION

20. Mollymook Beach - Sand Dune Vegetation and Amenity Issues File 30596E MOTION: Moved: White / Second: Baptist

(MIN16.463) RESOLVED, in accordance with the Committee's delegated authority from

Council, that the Committee support:-

- 1. Council staff positive engage with all residents from 2 28 Mitchell Parade Mollymook and meet to consult on:
- a. the new coastal dune
- b. Plant varieties for vegetation in the new sand dunes behind their dwellings. Species planted should minimise impacts on beach views and tracks.
- c. Continued ongoing access to the beach from the existing 6 tracks at the rear of the properties located 2-28 Mitchell Parade, Mollymook.
- d. Available Councillors be invited to attend meetings between staff and residents
- 2. That Council remove the prohibit entry signs on the beach tracks behind theresidents after 6 months (1st December 2016)
- 3. That Council invite residents to assist with Bush Care in the dune management.
- 4. That Council review the 6 tracks at the rear of the residents, in December 2016, toascertain whether there is a need to create a ramp effect allowing ease of accessto and from the beach along the tracks.
- 5. Effected Residents provide to Council current photographic records of beach/ocean views from their properties. Council to monitor with residents as required the effects of vegetation growth on the dunes with the photographic records and undertake necessary steps to work with residents and agencies regarding vegetation management.
- 6. That Council advise the residents of the current review the restrictive coastal hazard lines over properties 2-28 Mitchell Parade on council coastal plans and engage the residents/ratepayers in this review.

Collingwood Beach Preservation Group Proposed Amendments to the Collingwood Beach Draft Dune Vegetation Management Plan



FO Box 302 Vincenta NSW 25/0

Collingwood Beach Preservation Group

The Collingwood Beach Preservation Group (CBPG) was established to ensure Collingwood Beach is preserved and enhanced through the application of sound scientific principles to ecologically sustainable development. Ecologically sustainable development includes taking into consideration, in an integrated way, the wider social, economic and environmental implications of decisions and actions without compromising the ability of future generations to meet their own needs. The CBPG is a sub-committee of the Vincentia Residents and Ratepayers Association (VRRA) which is the Community Consultative Body that represents Vincentia to the Shoalhaven City Council.

Background

From time to time Collingwood Beach experiences storm surges and consequentially wave run-up that affects the beach. The foreshore dune provides the only immediate protection for the beach. However, Collingwood Beach is an accreting beach which means that it recovers naturally from storm erosion over time as sand deposits are gradually replaced.

Collingwood Beach is a key tourist attraction for the area. Tourists in turn support the community so it is in the community's interest to maintain the views across Jervis Bay from the coastal walkway whilst at the same time ensuring the resilience of the foreshore dune.

Shoalhaven City Council (SCC) engaged a consultant to produce a Dune Vegetation Management Plan (DVMP). The CBPG was not consulted with regard to the final content of the draft DVMP and maintain that the draft DVMP does not address the primary purpose for which it was produced nor does it address the best interests of the community.

Points at Issue

For many years the community and tourists had unobstructed views over Jervis Bay however those views were progressively blocked by the planting of high growth trees along the coastal walkway. The photos below show the past and current situation in front of 1A Susan Street, Vincentia.



1A Susan Street Vincentia 2001



1A Susan Street Vincentia 2015

The planting of high growth trees has resulted in the beauty of Jervis Bay, and the iconic view of Point Perpendicular, being hidden from the coastal walkway. It has also resulted in vandalism of trees in front of some properties which SCC has not been able to control despite its best endeavours. The draft DVMP works with the existing vegetation structure and thus does nothing to address the issues caused by the planting of the trees.

The draft DVMP outlines a case for the need to maintain trees to assist in the build-up of sand deposits on the foreshore dune. Sections along the foreshore dune consist of some areas that have trees and other areas that do not have trees. There is however no difference between the two areas in relation to sand build-up.

The draft DVMP also outlines a case for the need to maintain trees so that sand can be bound together in the face of wave action during minor storms. There are however no records of trees planted at Collingwood Beach resisting wave action and overseas experience demonstrates that planting trees on foreshore dunes has catastrophic consequences as evidenced from the adjacent photo of Culbin in the northeast of Scotland.



Further, the draft DVMP states that dead trees and shrubs are to be retained and mulch established on the dunes however this will only create a fire load in an urban environment which as evidenced from previous bushfires in the area can lead to loss of dwellings.

The Science

The draft DVMP includes references to a wide variety of literature stated to be in support of the vegetation proposed for the foreshore dune. However, a causal link from the vegetation referenced in the literature is not drawn to the specific circumstances of Collingwood Beach, namely a very narrow dune in an urban area. In that regard it is relevant to note that the NSW Government Department of Land and Water Conservation Coastal Dune Management manual does not identify trees as a suitable for planting on foreshore dunes.

At Collingwood Beach there is no difference in dune build up between areas that have high growth trees and areas that do not. This is consistent with the literature produced by various government authorities such as the Tasmanian Department of Primary Industries, Parks, Water and Environment Coastal Works Manual which states that low-growing plants, such as grasses, are more effective at stabilising sand than trees or shrubs as 90% of wind-borne sand is transported in the 0.5m closest to the ground.

Other literature from government authorities such as publications from the Queensland Environmental Protection Authority and Beach Protection Authority state that tree roots cannot provide protection against significant wave action. This has been endorsed by SCC. The literature presented in the draft DVMP claims that trees are nevertheless needed to reduce the impact of more frequent minor storms.

Some members of the CBPG have owned their properties for over 60 years. Nobody has a recollection of an event where the trees have reduced the impact of a storm and SCC has not produced any records to support such a contention. In fact the erosion from the recent significant storms of May and September 2015 did not even come close to the trees planted along the coastal walkway. Where isolated trees away from the coastal walkway have been exposed to wave action they have provided no resistance as evidenced by the adjacent photo at Collingwood



Conclusion

The draft DVMP is complicated and is not consistent across the whole of the dune system. Further, the draft DVMP is not based on scientific facts and does not address the root cause of vandalism. In addition, the draft DVMP incorporates a complicated and expensive monitoring regime.

A Simple 11 Point Plan

Beach near Moona Moona Creek.

The CBPG submits the following proposal for the DVMP:

- Under pruning of established mature trees to be at a minimum height of 5 metres. 1.
- 2. Reduction and maintenance of all vegetation outside of mature trees (defined as currently 6 metres in height) to a level of between 90cm and 1 metre tall that enables viewing of Jervis Bay by children and wheelchair users.
- 3. Existing clusters of banksia trees in Zones 3 and 4 to be reduced in quantity and height to a level that enables wide span views of Jervis Bay.
- All new growth banksia trees to be removed together with existing seedlings and saplings. 4.
- Removal of dead wood and dead trees.
- 6. Removal of vandalism signage.
- Approval of the request from Collingwood Beach property owners and residents to form a 7. dune care management group to maintain dune vegetation consistent with the agreed DVMP.
- 8. Removal of any trees that are potentially dangerous to pathway users or damaging the pathway with root undulation.
- All new plantings to be grasses or coastal shrubs which have a mature height and resilient 9. effect that are consistent with the agreed DVMP.
- Removal of pittosporum from all Collingwood Beach dunes which includes dunes south of Susan St.
- The exhibition period be limited to 4 weeks. 11.