

**Submission to Clarence Valley Council**

**Re**

**Wooli Village Draft Coastline Management Plan**

**Wooli Beach/Village Review of Coastal Hazards**

**Wooli Village Coastline Management Strategy Update and Options Review**

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The Wooli Village has existed in various stages of development for over 100 years. In that time, the beach has undergone changes which have been documented for 60 years but the nature of the spit, protected by the dune system, has remained essentially unchanged. The greatest potential hazard to the spit in that time was from erosion following its decimation by fire in 2009.

Apart from the training of the river mouth, the course of the river has remained unchanged although there is consensus among the longer term residents that the river is shallower and sandier than ever before.

The Village and spit have been protected from storm events over this period by the frontal dune system which, although going through periods of regeneration after loss from erosion, appears to be retreating westwards, such that, if no action is taken, this protection may be breached by a storm in the future.

The various previous local government iterations (which have now resulted in the Clarence Valley Council) have collectively identified this risk for decades and, to date, no significant attempts have been made to address this issue.

In that time and with council approval, residents have built or improved dwellings which are now the subject of this draft report.

The key to the protection of this priceless asset is the health of the dune system. It is our submission that it is premature to consider the situation irretrievable and that urgent action should be taken to rehabilitate this dune system.

### The Process of the Draft Report

These documents were produced and displayed on the CVC website with notification of ratepayers by mail and (we understand) advertised in the Grafton press only. A meeting with Scott Lenton was organized at less than a week's notice with submissions to be received within a further 2 weeks (now relaxed by a further 2 weeks). The documents are complex and long with significant use of jargon and therefore difficult to understand.

The CVC was aware that at least 35% of ratepayers do not live in the Village and would have to make a rushed trip to Woolli to participate in the face to face meeting.

This is in significant contrast to previous occasions when, on one occasion in 2002, Pristine Waters Council reopened consultations on a similar plan when they felt that insufficient members of the community had participated.

It is easy to draw the conclusion, based on the contents of the current draft, that CVC was happy to limit dispersal and comment on the plan.

The documents do not outline the brief Worley Parsons were given or the terms of reference for their report. I would have expected the commissioning letter to be appended so that any inherent biases or direction (and hopefully lack thereof) by CVC could be noted.

### The Science

Worley Parsons refer to no new data apart from some continuation of the photogrammetric survey (which has never been made available for viewing by the public) and the quite astonishing statement in the report and by Mr Lenton at our meeting that a Council employee had measured the distance between the dune and unspecified dwellings with a tape measure. Where is the documented surveyor's identification and detail survey report with all

measurements referred back to the local datum point and over what observation time frame?

Presumably the data on beach sand loss and dune retreat are merely lifted from the Patterson Britton Partners Report of 1997. The data quoted are identical. It is not acknowledged that PBP is now part of Worley Parsons. There is no assessment as to whether the process is proceeding at the same rate, at a slower rate or more quickly than the assessments suggested at that time. There is no information as to where the sand is going to apart from a statement lifted from a Dept. of Mineral Resources 1985 reference (but not included in the Bibliography) that 10-30,000 cum/year of sand was moving along the beach. There is no statement as to which direction it is heading.

There is a statement that Jones' beach has grown since the breakwaters were built and those who have been at Wooli since prior to that time recall that none of the sand now present east of the coffee rock cliffs was there then. The issue of the effect of the breakwaters in interrupting the northerly flow of sand has not been addressed. This is an important issue as, if there has been significant disruption to such flow, some liability for the beach problems would then fall upon the State Government.

The statement is made that the river exited at the northern end of the village 3500 years ago but since then has exited at or near its present site. This suggests that the sand spit has been quite stable. What has been the driver for this sudden concern regarding the river's course since there has been no discernible sea level change to date?

The use of climate change estimates of sea level rises is beset with enormous error ranges from virtually none (sceptics and those who believe intergovernmental action can keep temperature rises to <2 degrees) to more than 8 metres (if the northern polar icecaps are lost). A recent consensus report by The Royal Society concludes that no accurate predictions can be made regarding the degree of sea level rise in the future<sup>1</sup>. To further compound this, the Bruun calculation was used to predict dune recession. While we are not coastal scientists, we understand that there is a large error intrinsic to this

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<sup>1</sup> Climate Change: a summary of the science  
The Royal Society 2010

calculation (+/- 100%) depending on the assumptions fed into the computer for modelling and there is a significant body of opinion that it is not a reliable tool for this use.<sup>2</sup>

The use of hazard lines based upon a combination of both these assessments is therefore arbitrary and unhelpful. These lines suggest an orderly regression with time, however, in practice, with breach of the dune the entire spit would be lost in rapid sequence due to the significantly lower nature of the land behind the dune. These hazard lines have allowed years of procrastination and cloud the real issue which is immediate dune protection.

Building codes which demand transportability of homes are superficially appealing, however to consider that it would be practical to move 10 or more houses out of harm's way in an emergency, is naïve. Where are the removal semitrailers in the region? How do they get in when the road is flooded? Where are they parked in town awaiting deployment or redeployment?

The idea that the water tower could be moved and at a cost of \$500,000 shows a significant lack of understanding of the geography of the town and current building costs. The tower is located on the highest point between the Wooli River and Wilson's headland and, if threatened, would indicate the uninhabitability of all the land from Wooli to Lake Hiawatha if the dune protection was removed. The tower is built on the only rocky site in Wooli (except for a similar rise just south of the Bowls Club). To build on the sandy ground north of the town would be likely to require an enormous sum just for foundations!

There is a considerable investment by the NSW Government in the area behind the dunes, most notably the Wooli Public school which has just had a considerable sum invested in new buildings and landscaping. To abandon this would seem profligate.

Finally, the report contains elements clearly lifted from a previous generic report:-

There are no McMansions in Wooli (p42)

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<sup>2</sup> Cooper JAG, Pilkey OH  
Sea Level Rise and Shoreline Retreat: Time to Abandon the Bruun Rule  
Global and Planetary Change 43: 157-171, 2004

There has been no sandmining in Woolli (p43)

There are no stormwater outlets on the beach in Woolli (p43)

In the words of Dr Tim Flannery “What we need now is good information and careful thinking” i.e. experimental data not computer modelling. No significant attempts have been made to ameliorate beach erosion at Woolli and such should be made and assessed before any thought given to “planned retreat” (vide infra).

### Social Justice

The immediate effect of Council adoption of this plan would be the collapse of the real estate values of the village. There would be loss of jobs in the real estate office and a disincentive for new residents to move into town further endangering the value of existing businesses. The statement by Worley Parsons that this would facilitate any future buyback is callous and self-serving.

There are a group of elderly residents whose entire wealth is bound up in their homes. Retirement and end of life care require that those homes be sold to fund such care in places away from Woolli such as Grafton and the collapse of the real estate market would destroy those lives and plans.

There are those residents who have built homes, with Council approval, at times prior to now where the natural assumption was that the beach would be protected. The NSW Coastal Protection Act of 1979 prescribes “the *protection and preservation* of the beach environment, amenity and access. *Property should be protected*”. The Woolli Beach Rehabilitation Plan as recently as 2005 contains the commitment “ to *restore, stabilize, protect* and enhance the Woolli coastline and *restore* the ecological integrity of vegetation communities of the Woolli dune system” Since no meaningful action has been taken to implement such a plan and if the situation is now deemed irretrievable, Council inaction could be deemed responsible and it would be likely that the resort of litigation could be used to recoup losses by all those affected. If the situation is not irretrievable (and who could know since no experimental beach works have been undertaken) then action rather than inaction should guide the Council.

Woolli is home to businesses related to real estate, retail shopping, hospitality, fishing, oyster farming and tourism. Incomes generated in the village by

residents and visitors are measured in \$millions while further income is generated in the wider regional area. The Woolli Bowls and Recreational Club is the social hub of the entire Pillar Valley region.

The total value of the real estate, businesses and future earnings of the Village would be assessed in excess of \$250m. were it replaceable.

### Aesthetics

People choose to live in Woolli (and tens of thousands to visit) because it is one of the most beautiful and unaffected areas in Australia. The village has many examples of original beach shacks (ours dates to the 1920's) with no capacity for significant further development. The village has not contributed to this problem by reckless or unrestricted development and it complies with all North Coast Urban Design Guidelines and the Ulmarra Local Environment Plan. The village is one of a diminishing number of family seaside destinations where unaffected holidays can be had without the trappings of modern development. If the village is lost, it cannot be replaced or replicated elsewhere. It is unique unto itself. To contemplate allowing such a place to be destroyed without good evidence of such destruction's inevitability is bordering on criminal negligence.

### Governance

Woolli residents are ratepayers along with the rest of CVC property owners. In recent years Woolli land valuations have markedly risen with concomitant rate income increases to the CVC. Woolli residents expect local government to be active and acting in their best interests. This proposal seeks to remove any responsibility for beach management and its consequences from the CVC. It is not government; it is its exact antithesis.

It is a sad reflection on the human face of Council that a proposal to abandon a village of 500 could be received with anything other than disbelief. The statement was made by Mr Lenton that no help could be obtained from the Marine Parks Authority to sanction sand retrieval for example. If this is true then that places the MPA above the people which it serves and common sense should be restored by the State Government. These matters can usually be resolved by sensible people of goodwill.

## Voluntary Relocation and Land swap

The future of the entire village lies in maintenance of the dune structure. If there comes a time when incontrovertible evidence exists that the dune structure cannot be protected then spending money on relocating locally to an area of lower AHD than the breached or soon to be breached dune would be a waste of money. The question of block allocation and compensation, alongside the question of who would pay for the relocation of existing or construction of new dwellings would be a nightmare.

The only sensible relocation would be to a similar but unthreatened area with an exchange of land of equal area within the national park such as the back beach of Minnie Water.

## Proposed Alternative Plan of Action

1. An immediate community based dune vegetation project with planting of the dune with appropriate shrubs and grasses. This would very quickly decrease the distance felt between council and community. Planting should also be done to restore the burnt out spit (this should have been done 12 months ago)
2. A comprehensive identification and detail survey of the beach at defined positions between the breakwater and One Tree including a beach profile.
3. Creation of a second line of dunes in front of the existing (now planted) dune by appropriate ecologically sound methods (Beach scraping or sand pumping). This dune to be planted in 12 months when more receptive to growth.
4. Restoration of the beach below the dune line by sand dredging and pumping. Sourcing the sand from the river below the kiosk to the mouth and bar would be both convenient and ameliorate the identified flood risk. It would also address the issue of bar navigability which has been the major identified concern by local residents regarding the river.
5. Ongoing survey as in point 2 to establish the success of this plan and any requirements for subsequent supplementation and the frequency of such supplementation.

6. A scientific assessment of the effects of the breakwaters on sand migration and trapping. A plan could then be developed to alter the river mouth if this was shown to be desirable.

The costs involved in this process were identified by Mr Lenton at our meeting as being in the order of \$1m – an inconsequential amount considering the value of property to be protected and less than the CVC is likely to spend defending legal challenges to this draft plan.

State and Federal authorities should be canvassed for funding (I note that the 1997 beach scraping proposal was to have been funded by the NSW Dept of Land and Water Conservation)

There exist provisions in the Local Government Act for recovery of at least part of the cost of beach protection by way of an annual levy on the benefitting ratepayers.

### Summary

The cost of this active response by the CVC is a fraction of 1% of the asset that is Wooli and must be assessed in practice.

While the Worley Parsons opinion may be proven correct in the long term if sea levels do rise, **the doubts about the draft report's conclusions and the importance and value of the town are such that abandoning an asset such as Wooli on this basis is premature and such a decision is not supported by a sufficient body of solid scientific evidence as to be unchallengeable. In addition, there is a complete lack of experimental evidence on the effect of beach restoration to reinforce the dune system. Such evidence may show the way to long term protection unless there is a significant rise in sea level in which case the future of the whole of coastal Australia will need to be rethought.**