

## EUROBODALLA SHIRE COUNCIL

### PUBLIC FORUM

All members of the community who have registered have been advised that they have a **maximum of seven minutes** to put their case.

Ordinary Meeting of Council on **13 December 2022**

<b>Name</b>	<b>Subject/Comments</b>	<b>Presentation?</b>	<b>Hybrid</b>
<b>Public Forum – 10.30am</b>			
Graeme Shoobridge	PSR22/065 Draft Eurobodalla Open Coast Coastal Management Program	Yes	In person
Colleen Krestensen	PSR22/065 Draft Eurobodalla Open Coast Coastal Management Program	No	Zoom
Ben Stainer	PSR22/063 Revision of Weeds Control Programs	No	In person
Rosemary Deadman	PSR22/065 Draft Eurobodalla Open Coast Coastal Management Program	Yes	In person
Trish Hellier	PSR22/065 Draft Eurobodalla Open Coast Coastal Management Program	Yes	Zoom

**PUBLIC FORUM ESC – 13 DECEMBER 2022**  
**EUROBODALLA OPEN COAST CMP PRESENTATION**

**GRAEME SHOOBRIDGE**

**Introduction**

My name is Graeme Shoobridge and I am a qualified Civil Engineer [BE (Civil) UNSW 1973] and I am a Fellow of the Institution of Engineers Australia [FIEAust, CPEng, NER, APEC Engineer, Int PE(Aus)] with almost 50 years of experience since graduation.

I am speaking today as a resident of the North Batemans Bay / Surfside precinct as a concerned member of the general public about the Draft Eurobodalla Open Coast CMP which is to be considered by Council.

Today I wish to raise a number of issues in relation to the Draft CMP and these are:

1 I believe that the inner bay at Batemans Bay operates as an estuary and NOT as an Open Coast and so I believe that the modelling algorithm that has been used is over-simplistic as it fails to recognise or take account of the very complex characteristics of current and sediment transport which are displayed in the estuary during coincident oceanic inundation (spring tides) and river flooding (storm events). This leads to some very serious failings in the identification of the nature of the coastal hazards that are currently threatening Cullendulla and Surfside and as a direct result to the identification of appropriate remedial and protective works to limit future erosion.

2 I am concerned about the threat to Cullendulla Creek as a result of natural coastal processes and the impact of the development which has been approved for a caravan park and tourist facility at the northern end of Myamba Parade. Studies have been undertaken of the complex interactions between flows from the Clyde River and the incoming impacts of coastal processes within the Batemans Bay Inner Bay Estuary. Cullendulla Creek is described as a barrier estuary containing a tidal creek and the only known chenier site in NSW and one of only two known and documented sites in southern Australia. Cheniers are defined as low, shore linear, swash deposited sand and shell that overlies by inter-tidal and sub-tidal mud as the result of wave deposition in a muddy tidal flat environment. The entire system represents a unique coastal system and preserves an excellent record of sea level rise, estuary filling and shoreline progradation over the past 10,000 years.

The Cullendulla Creek precinct and chenier plain represent a unique formation of significant heritage significance which also includes evidence of numerous Aboriginal occupation sites and is extremely vulnerable to further recession following recession of 40 to 60 metres during the period 1930 to 1990.

These two issues represent the major shortcomings in the CMP as neither Cullendulla Creek nor Surfside Beach have received any significant works in the program of works.

I am informed on 12 December 2022 that there will be \$1.5 million for protection of Surfside from coastal inundation, however I was not able to locate this on the maps nor in the documents (probably because of the very small fonts when printed at A4) and until this time I have not been advised of any such details in any community engagement opportunity. This is another example of the complete failure of the ineffective community engagement plan for this CMP.

### **Coastal Management Program (CMP)**

I expect that the CMP will be endorsed and adopted by Council as this is a requirement of the Coastal Management Act for funding for protective and remedial beach protection works.

I accept that the Coastal Management Program concept and documentation is a very complex subject and the documentation that has been presented for consideration is very extensive and is supported by additional studies and reports which have been prepared over the past 20 years.

I generally support the need for a CMP for the full length of the Eurobodalla Shire coastline, however I believe that for such an important document which will play a critical role in coastal land use planning and coastal management into the future, the CMP must be soundly based on rigorously tested factual information and robust analysis of modelling of hazards and threats and subsequent identification of remedial works.

I have reviewed the documentation made available during the public exhibition of the Draft CMP, however I have not been able to identify some important information relating to considerations and procedures which I consider to be very important in providing assurance to the

community and stakeholders that the CMP will be robust and fit for purpose.

I confirm from my experience in traffic modelling over my career, that **“ALL MODELS ARE WRONG, SOME ARE USEFUL”** and I note that major roads infrastructure costs \$ billions rather than millions!

### **Overall Concerns with CMP Processes and Outcomes**

The key information required to be provided leads me to the conclusion that, on the basis of the documentation provided as part of the CMP package, I AM NOT CONVINCED that the CMP is complete or coherent such that the community can rely on the recommended works program and funding to provide protection of their interests.

Ideally, these deficiencies should in my opinion, lead to deferment of the adoption of the CMP pending provision of such important supplementary information. Realistically, I suggest that suitable conditions may be applied by Council to require the information to be provided as a high priority before implementation of the CMP proceeds.

In addition to the above, I have some very serious concerns about the CMP which I believe MUST be addressed by conditions / caveats on the endorsement by Council and these are:

### **B Adoption of the Open Coast Modelling Approach**

The CMP Stage 1 – Scoping Study Section 4 Scope of the CMP describes the structure of the coastline of Eurobodalla Shire which has been divided into four coastal management areas (refer to CM SEPP) within the study area.

Section 4.1 Geographic Scope includes the following:

***“Major river estuaries including the Clyde River at Batemans Bay, Moruya River, Tuross River and Wagonga inlet at Narooma. Similar to the coastal lakes, the rivers and their catchments are largely outside the scope of the study, but their entrances will be considered in this CMP.”***

This approach is consistent with a number of earlier background studies (including Estuary Management Study and Plan for the Batemans Bay and Clyde River Estuary, Batemans Bay Vulnerability Study DLWC 1996, Estuary Processes Study for Batemans Bay WBM Oceanics 1999,

Batemans Bay and Clyde River Estuary Management Study Final report WBM Oceanics 2004, Draft Batemans Bay Coastline Hazard Management Plan WMA 2001 / September 2006, Wharf Road Coastal Hazard Assessment and Management Plan BMT WBM May 2008 and many other cited background studies and reports.

The Coastal Zone Management Plan Wharf Road North Batemans Bay May 2017 report presented (amongst other information relating to the estuary) in Figure 3 : Sediment Transport Mechanisms in Batemans Bay (after Patterson Britton & Partners 1992) a Conceptual Model of Sand Transportation Pathways in the inner bay (or estuary) between Observation Head and Square Head within Batemans Bay downstream of the Clyde River bridge. This Figure 3 demonstrated a complex series of longshore drifts and tidal flows and flooding sediment transport flows under a range of storm and swell conditions affecting both the Clyde River and estuarine waters.

The key issue here is that the adoption of Open Coast modelling for the CMP fails to identify and acknowledge the very specific characteristics of estuary waters (defined in the CMP as “ ***Estuary – The CM Act defines an estuary as any part of a river, lake, lagoon, or coastal creek whose level is periodically or intermittently affected by coastal tides, up to the highest astronomical tide.***”

This definition clearly describes the Clyde River estuary from the inner bay to the Clyde River bridge. The expression ‘Open Coast’ is not defined in the CMP, although the implied description is that ocean processes are inwards and outwards action along the coastline by waves which have been generated in the Tasman Sea.

Although not specifically addressed in the CMP, it appears as if the modelling algorithms used are based on the modified Bruun Rule (which is appropriate for the analysis of inwards / outwards wave action – without underlying rock strata – which is appropriate for most Open Ocean analysis. The Bruun Rule is not appropriate for analysis of the more complex multi-directional movements which are observed in estuary waters, such as is the case along Surfside Beach, which are subject to longitudinal flows and sediment movement along the shoreline.

There is significant historical evidence in support of the inner bay of Batemans Bay / Clyde River (between Observation Head and Square

Head and the bridge over the Clyde River being classified and analysed as an estuary (rather than Open Coast).

The characteristics of water flows, sediment transport, geomorphic features and bathymetric parameters are different from (and far more complex than) those for an Open Coast and the algorithms required for analysis of an estuary are very complicated and would involve including the effects of all man-made works and actions (including dredging, breakwalls, bridges, etc) as well as river flows, tides, floods, waves, tides, etc. The informed commentaries on this subject acknowledge that the conditions prevailing in an estuary represent a dynamic environment which requires specific and detailed assessment rather than the simplistic model of the modified Bruun Rule.

The shift to an Open Coast assessment appears to avoid these considerations and thereby avoids the need to point out the fact that man-made works may dominate the interaction of river and ocean forces within an estuary.

The most appropriate solution to this incongruity is to exclude the Batemans Bay estuary from the Open Coast CMP assessment and undertake specific and detailed analysis and evaluation of the impacts within the estuary. The CMP analysis appears to be generally suitable for Open Coast coastlines suitable for the use of the Bruun Rule.

### **Key Information Required to be Provided**

I am not convinced about the following considerations and procedures within the CMP that I feel render the CMP modelling and documentation to be NOT FIT FOR PURPOSE as it currently stands:

- a) Conformance with the requirements, aspirations and objectives set out in the scoping study (eg community expectations / values / engagement / consultation, scope of the CMP, coastal management areas, Open Coast vs Estuary Waters, etc).
- b) Some assumptions which have underpinned the Base Model are not consistent with some information presented in background studies and historical facts and there is insufficient discussion to justify some of the assumptions that have been made (Datum tide gauge, Open Coast / Estuary boundaries / interfaces).
- c) There is no information presented to confirm that the Base Model has been subject to best practice robust verification, calibration or

- validation procedures to ensure that it delivers accurate reflection of existing conditions based on relevant factual historical data.
- d) There is no information to confirm that the predictions of future conditions have been validated by checking of all input data (projections of climate change, sea level rise, rainfall intensities, wet / dry cycles, etc) within each respective design period.
  - e) No evidence is presented in the documentation to confirm the application of sensitivity testing to potential variations in projected input data or assumptions of future conditions to determine the likelihood of any changes to the output information which may affect conclusions and identified recommended remedial works.
  - f) Application of “Best Practice” principles requires independent expert peer review for a study of this significance (works budget of \$75m) to confirm concurrence with assumptions, methodologies, , analysis, interpretation, conclusions and recommendations.
  - g) I can find no evidence of the engineering analysis (based on accurate geomorphology or bathymetric surveys) which led to the identification of preferred options for remedial / mitigation / protective works and prioritisation for implementation.
  - h) On the assumption that implementation of physical works is likely to have secondary unintended impacts within waterways, I can find no evidence that progressive implementation has been modelled on the basis of a progressive or staged (10 year) funding and implementation program to identify any adverse impacts.

## **C FUNDS TO FIX BATEMANS BAY EROSION**

The elephant in the room is the failure of the CMP to fully acknowledge the commitment made by the NSW Government (including letter signed by the Premier, press release issued by Environment Minister Gabrielle Upton on February 25 2019 and verbal assurances by Member for Bega Andrew Constance) for the allocation of funds “ .. ***up to \$5 million has been reserved to help find a solution.***” To tackling erosion along the Batemans Bay waterfront.

In addition, Ms Upton indicated that, “ ... ***the NSW Government will lead the study with an immediate, additional grant of \$250,000 to fund an urgent options study*** ”and “ ... ***We are acting fast to address the urgent concerns of residents on the northern shore of Batemans Bay, Surfside and Long Beach.***”

The CMP fails to deliver on the commitment to fund an urgent options study to help find a solution and Council have not communicated with the local residents and Eurobodalla Coastal Alliance about any progress or methodology for the “**urgent options study**” which was promised to the community. This is another example of the disingenuous approach to community and stakeholder engagement in the light of the objectives set out in the Stage 1 – Scoping Plan Community and Stakeholder Engagement Plan. In Section 2 Purpose and Objectives, the key objectives include as number 1:

**Confirm – Confirm that Council have taken on board the community feedback in previous consultation and are now undertaking the additional geotechnical work, hazard studies and consultation the community has requested.**

The key objectives continue with;

**2 Educate and Inform, 3 Ensure and 4 Clarify and Deliver which all strive to educate and inform the community, ensure awareness of the CMP across the whole community and facilitate residents feedback and to clarify roles and responsibilities for implementation of the CMP.**

Until the public exhibition of the Draft CMP in November 2022 the majority of the Surfside community and residents were not aware that the CMP had rejected any works along the Surfside Beach frontage based on the Open Coast modified Bruun Rule analysis which suggested two potential configurations of offshore breakwaters which were rejected on cost / benefit analysis.

This limited (and inappropriate) analysis failed to include any consideration of groynes from the southern end of the beach to limit the north to south transportation of sediment from the main beach or any form of rock revetment along the sand embankment in public land along the length of the beach or other alternatives.

The CMP fails to include any significant acknowledgement of the commitment to include an urgent options study for the northern waterfront and fails to present any suite of potential options that may have been identified from such a study for consideration by the community. This is a failure to fulfil the aim indicated by Ms Upton in the press release that “ **... The only way to achieve a practical and scientifically rigorous solutions is by working together across governments and with communities.**”



The most appropriate solution to this failure is to exclude the Batemans Bay estuary from the Open Coast CMP assessment and undertake specific and detailed analysis and evaluation of the impacts within the estuary in consultation with the affected community and stakeholders.

## **A Community Consultation and Engagement**

The CMP includes in Appendix A an ambitious Community and Stakeholder Engagement Plan which gives a very strong commitment to working with the community in addition to the CMP reporting a comprehensive consultation program during the development of the CMP.

In my opinion, the consultation to date has been ineffective in informing the community and in capturing and reasonably responding to the questions and concerns which have been expressed by members of the community over the past 10 years.

The Engagement Principles which are outlined in the CSEP include:

- be open and inclusive (for community involvement)
- generate mutual trust and respect and be accountable all engagement engage early and provide information that is clear – communication
- be considerate and provide feedback to community – up to date
- value and acknowledge skills and resources – identify opportunities
- engagement with other projects to develop community engagement

This failure to deliver effective or respectful consultation will seriously need to change if the CSEP is to be effectively implemented as an integral part of the CMP and this will require a dedicated management of community and stakeholder engagement by Council.

## **Conclusion**

I strongly recommend to Council that they place conditions on any endorsement or approval of the Draft Eurobodalla Open Coast Coastal Management Program as follows:

A Council commit to comprehensive implementation of the Community and Stakeholder Engagement Plan as set out in the CMP

B Council commit to the deletion of the Batemans Bay estuary from the Open Coast CMP and commit to undertaking a specific and detailed analysis of the impacts in consultation and engagement with the community in order to find robust solutions to resolve the coastal management issues impacting on Wharf Road, Surfside and Long Beach.

Graeme Shoobridge

13 December 2022

Dear Mayor, Councillors and general manager,

Firstly I would like a show of hands from those of you who are NOT familiar with the Surfside beaches?

Now can I have another show of hands from those of you who have actually visited the area in the last month or so?

If you have not even been to the area and because you have not been councillors for very long, you have had very little time to understand to any extent, the complex issues causing the erosion in Surfside. It is even difficult for our residents to comprehend. What is a fact is that Surfside is vulnerable to massive erosion RIGHT NOW. This is a certainty as opposed to climate change which is very variable and into the future. In fact on Saturday another 2-3 metres of dune was taken at the northern access point to Surfside beach from a moderate swell as in the photo. This is in addition to 4 metres lost earlier this year which removed the protective height of the dune to the northern end and the sea has washed into backyards and numerous trees have fallen in. This dune does not come back. In fact erosion has been ongoing since the 1980's in particular, when the sea wall on the other side was extended out to Corrigans Beach, creating faster river flows for boating but also sucking sand from the northern shoal and creating acres of new land off Hanging Rock and Corrigans Beach.

You might have seen reports of the temporary boat ramp at Korners Park Surfside, which was being erected during the construction of the new bridge and was washed away in a minor rain event, see photo. This is an example of their modelling which GHD ADMITTED, would create faster flows on the northern side of the river as evidenced now with the massive and accelerated erosion to the area on Wharf Road where Black Duck had his encampment and to the massive loss of sand to Surfside and Cullendulla. This CMP denies that any man made infrastructure has caused our issues. It claims all the accreted sand at Corrigans Beach has come from upriver. Where is our sand then? Don't forget the 42 block subdivision

that was in this same area that was washed away after the original bridge had its pylons placed in the river.

It is obvious by looking at these maps, that mitigation is only being used to protect council infrastructure and not private property. You can see on the maps the trigger points on most beaches in the shire, which show where sandbagging will occur but Surfside beach is not even included and it is the most vulnerable. Mitigation for Surfside will comprise the dumping of sand (proven in the past to be a very temporary and expensive option), which will only happen every 4 to 10 years when sand is available from dredging the river entrance. What are we supposed to do in between these dredging events? Why are we being totally ignored or is there some sort of agenda here? What happened to the \$5 million in funding promised by Andrew Constance. This is not mitigation if it is not done before or when required.

Did you know that there are massive fines to anyone who dares to lay a sandbag to protect their homes? Imagine the outcry if this same rule was applied to bushfire situations and you were not allowed to use the hose to fight the flames. Think about that for a minute.

This CMP is an insult to Surfside property owners and I request that Surfside be removed from this CMP which was never an "open coast" location. I ask you to think about what is going on here before you cast your vote and if you are not up on all of this, it would be unconscionable for you to approve this CMP. 250 families in Surfside alone, who YOU were elected to represent, are depending on you to do just that. Remember you are one of us.

Thank you for your time.

Rosemary Deadman

Good morning Mayor, Councillors, General Manager, Staff, Gallery and those comfortable zooming from home my name is Patricia Hellier from Batemans Bay.

**PSR22/065 Open Coast CMP** this has been a long drawn out process over a **10 year period**. A bit of background information **Eurobodalla Sea Level Rise document** was produced by consultant **White Head and Associates**. The night this policy was presented to Council saw the gallery, committee room and foyer overflowed with concerned residents and there were a large number of presenters. Once this policy was adopted the result was a drop in Realestate values **by 30% on affected properties**. Whitehead and Associates also provided a policy to **Shoalhaven Council** this Council adopted what I believe was a more sensible policy which was based on a **“wait and see” policy to be review every 7 year**.

Whilst **Rhelm Baird Innovation Engineeres** have produced this final document there has been at least 4 other consultant firms engaged over this period of time.

Reading the documents attached to this item I counted some **31 Attachments**. I am not an Engineer, Mayor and Councillors you are not Engineers and **I am not convinced that the 7 new Councillors** could possible vote on this item given that it is stated on **page 27** of the Council Agenda that you have had only two briefings on this issue one in **February 2022 and one in October 2022**.

Here we go again another **major item being presented just before Christmas** I question “what is the haste is it just to **secure funding from the State Government?** How many other Councils have adopted their CMP ? **or are we the leaders of the pack**” ?

I question that it states on **page 28 of the Agenda** that **5 Community Workshops** were held in **August 2021** and yet during this time **we were in lockdown**. I also note that on **page 28** it states that **CEMAC Workshops** were conducted **it should be noted that those that represented the community at these CEMAC Workshops we asked to sign a “non disclosure statement” it should be asked “how were these people expected to represent their community and yet they could not report back to their communities the outcome of their workshop” how can this be considered “open and transparent”**.

Mayor and Councillors can you honestly say that you believe this **CMP Policy will address the many relevant issues**. Historical evidence and Council’s own records confirm that the erosion of the Wharf Road subdivision started with the construction of the **OLD BATEMANS BAY BRIDGE IN THE 1950’S**. These issues are covered in the **Sethi Report and endorsed by Mr Angus Jackson who is arguably Australia’s top Coastal Engineer**.

In the report from the peer reviewer of the New Batemans Bay Bridge confirms that river turbulence created by the pylons andsi **resultant erosion** will continue to be worse on north side of that bridge.

**The Southern Sea Walls have been identified as major contributors to the erosion of the northern sand shoals.** Their erosive actions has deposited millions of tonnes of that sand on Corrigans Beach, **a beach that has grown by 300 metres since engineering works started in the 1950's.**

The residence of Wharf Road and Lower Surfside have every right to expect the remedial works to be carried out without a community contribution . When **Minister Andrew Constance** was our **Local Member and the then Minister for the Environment Gabrielle Upton** **accepted responsibility for the erosion**, and had \$5 million allocated for initial work toward a protective sea wall and yet this area remains unprotected.

I question why does the **Vulnerable Mapping stops at Tomakin** it would appear that Broulee and south are not seen to be a risk and yet areas of Malua Bay, North Cove Road and Long Beach areas will **have this vulnerable status applied to properties documents if the CMP is adopted.**

**Councillor if you vote in favour of this CMP Policy are you confident that you are totally familiar with the contents of the Policy ?** If this policy is adopted those that vote in favour of the policy will be seen to be the **Councillors who were responsible for this Vulnerable Status placed on the 1,800 property documents.**

Patricia Hellier