

**Friends of  
Minnamurra River Incorporated<sup>1</sup>**

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**EPBC NO. 2023/09552**

**COMMENTS FROM FOMR INC. ON MULTIPLE ADVERSE (DESTRUCTIVE) IMPACTS ON  
MNES-CEEC AT BORAL LIMITED'S DUNMORE LAKES SAND PROJECT MODIFICATION  
2, POND 5B EXTRACTION**

**cc. Minister for the  
Environment, Tanya Plibersek; The Secretary, Dept of the Environment, Canberra**

- 1. Approval of the above project will breach several provisions of the *Environment Protection and Biodiversity Conservation Act 1999*, not only causing public embarrassment to the Minister but putting her Department in contravention of the very legislation it is charged with administering and enforcing.**
2. The reason is straightforward but has been completely missed by the many demonstrable shortcomings and inadequacies of the “research” and limited fieldwork of Boral Limited’s client-biased environmental and ecological assessment consultants during the past four years.
3. The ecological community under imminent threat of destruction and modification is 7.5 hectares of *Littoral Rainforest and Coastal Vine Thicket of Eastern Australia* (Southeast Littoral Rainforest listed under the EPBC Act in 2008 as critically endangered and now also the subject of an Australian Government National Recovery Plan.
4. Additionally, two other Endangered Ecological Communities, also listed under the EPBC Act - Swamp Oak Forest and Temperate Coastal Saltmarsh – are under imminent threat of destruction, damage and modification from the same development at the same site.
5. Boral and its consultants continue to assert that the listed SE Littoral Rainforest will not be impacted by the Stage 5B sand mining *but this is entirely incorrect*. For the following reasons, the complete destruction of a substantial area of the Littoral Rainforest MNES, which would adversely impact and possibly destroy the remaining area of the MNES, will occur if the Boral Limited application (EPBC no. 2023/09552) is approved:
  - The EPBC Act-listed SE Littoral Rainforest MNES at and immediately adjacent to the site is not a discrete stand or area, as all Boral Limited’s consultants assert. In various stages

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<sup>1</sup> Friends of Minnamurra River (FOMR) is an active incorporated community-based association formed five years ago to conserve, protect and enhance the estuarine and catchment ecosystems of the Minnamurra River. It has qualified expertise available to it and within its membership in plant and animal ecology, archaeology, hydrology and environmental science.

of growth from mature to immature and new regrowth, qualified FOMR personnel have observed that it is **found throughout the Stage 5B site as an integral part of the Bangalay Sand Forest ecosystem**, listed in NSW also as an endangered ecological community and which covers the entire Stage 5B site.

- This integration of the critically endangered SE Littoral Rainforest with the Bangalay Sand Forest EEC on Boral's site 5B is not unusual. Your own Department of the Environment has confirmed in its *Identification Guidelines for Endangered Ecological Communities – Littoral Rainforest in the South East Corner, Sydney Basin and NSW North Coast bioregions* that SE Littoral Rainforest may “adjoin with or intergrade with” Bangalay Sand Forest. The Department's Guidelines state: “This (Littoral Rainforest) community would have previously occurred or closely resemble other ecological communities that are now also listed as EECs. These EECs are: *Bangalay Sand Forest*, *Swamp Sclerophyll Forest* or *Swamp Oak Floodplain Forest* (and Littoral Rainforest) will intergrade in areas near the coast that experience more frequent fires and/or have impeded drainage and/or higher water table.”<sup>2</sup>  
(<https://www.environment.nsw.gov.au/resources/threatenedspecies/EECLittoralrainforestlores.pdf>)
- The Guidelines also state: “Note, the communities may have a shrub layer of rainforest type plants with a non-rainforest tree layer.” This appears to be exactly the situation that FOMR qualified personnel have observed with the integration of SE Littoral Rainforest and Bangalay Sand Forest EECs as they occur together **throughout** the proposed 5B mine site. This has, however, seemed to have eluded Boral's consultants over the years, possibly because of their preference for office-bound desk studies rather than the very occasional and very minimal ground or field work as clearly evident in their reports in support of Application 2023/09552 and their apparent ignorance of the fact, as supported by botanic authorities, that Bangalay Sand Forest and SE Littoral Rainforest can intergrade or form sub-alliances.
- Further evidence of the integration of the Commonwealth-listed EEC, SE Littoral Rainforest with the NSW-listed EEC, Bangalay Sand Forest throughout Boral's proposed Stage 5B mine site is that eight of the plant species that characterise the Littoral Rainforest EEC are also in the list of species that characterise the Bangalay Sand Forest EEC.
- This is further confirmed by a number of authorities, including Floyd<sup>3</sup>, who agree that there are up to five sub-alliances or local variants of SE Littoral Rainforest in NSW, including one, Floyd's Suballiance 20, a less structurally complex Littoral Rainforest, found only south of Sydney (and likely that present with the Bangalay Sand Forest throughout Boral's Stage 5B mine site).
- The NSW Government's Scientific Committee (established by the NSW *Threatened Species Conservation Act*) says of SE Littoral Rainforest that “There is considerable floristic variation between stands and in particular areas, localised variants may be recognised (for example, on the south coast, a number of variants have been recognised)}. This may have made it difficult for Boral's consultants to identify the widespread nature of the Littoral Rainforest EEC throughout the Stage 5B mine site. **All authorities,**

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<sup>2</sup> *Identification Guidelines for Endangered Ecological Communities – Littoral Rainforest in the South East Corner, Sydney Basin and NSW North Coast bioregions*, ISSN 1834-9935, published by the Department of Environment and Climate Change, with the Australian Government's Natural Heritage Trust, Canberra, DECC2008/153, p. 2.

<sup>3</sup> Floyd, A.G., *Australian rainforests in New South Wales*, Vol 1 and 2, Surrey Beatty and Sons, Sydney, 1990.

however, state that the local variants and sub-alliances still constitute the Littoral Rainforest as listed under the EPBC Act.

- **Boral and/or its consultants have never undertaken a full field survey and analysis of all the botanical species comprising either the SE Littoral Rainforest EEC or the Bangalay Sand Forest EEC present on the 35 hectare mine site and have therefore been unable to identify the extent of the EPBC-listed Littoral Rainforest or, more significantly, the fact that it is a local variant plant community integrated or ‘intergraded’ with another EEC, the Bangalay Sand Forest.**
  - The *Assessment of Significance – EPBC Referral* prepared by consultants, Niche Environment and Heritage Pty Ltd for Boral Limited and published on 15 June 2023, and section 3.1.2 of the Boral EPBC Referral (no. 01696 of 16 June 2023) confirms that Boral will cut, clear and remove *all* vegetation over 7.5ha to 8.13ha of its 35ha site.
  - **EPBC LISTED EEC WILL BE CUT AND CLEARED.** Boral’s documents state that **all of the Bangalay Sand Forest ecosystem, including 38 very large Bangalay trees (*Eucalyptus botryoides*) 100 to 400-years-old, in the northern section of the site will be completely destroyed, together with the EPBC-listed, critically endangered SE Littoral rainforest ecological community inextricably associated with the Bangalay Sand Forest.**
  - **Such destruction of the SE Littoral Rainforest ecosystem which, as shown above, is part of or integrated with the Bangalay Sand Forest ecosystem to be removed, will constitute a clear and very substantial breach of the EPBC Act.**
  - **In addition to the SE Littoral Rainforest to be cut and cleared with the Bangalay Sand Forest, part of a relatively large area of vigorous, healthy, mature and undisturbed Littoral Rainforest – *not* identified in any of Boral’s maps or information provided as part of its EPBC Referral - overhangs the western boundary of the 7.5ha dredge pond site (marked on Figure 3 of the Referral) and will, itself, also have to be cut and cleared to make way for the dredge pond - again in clear contravention of the MNES provisions of the EPBC Act.**
6. Much of Boral Limited’s key documentation presented to the Department of Environment as part of its EPBC Act approval application is *inaccurate*. That is understandable given that throughout Boral’s five-year campaign to gain approval for the Stage 5B sand mine, it has consistently obscured, omitted or glossed over negative assessments of environmental impacts of its proposals.
7. **There has been very minimal environmental assessment or flora and fauna fieldwork or ground truthing undertaken. Nearly all of such assessments and studies in the past five years, including work by the NSW Department of Planning, have been desk studies or estimations only.**
8. The NSW Government relied on Boral’s assessments to make its case for approval, on Boral’s behalf, to the so-called NSW Independent Planning Commission (IPC) (whose two commissioners were appointed by the then NSW government). Consequently, the NSW government case was incomplete and riddled with errors, omissions and inaccuracies. These were revealed in a detailed analysis by FOMR, the results of which are at:  
[https://www.saveminnamurrariver.org/\\_files/ugd/233a65\\_61e1ba2a9f1d48c78b9b7479b84f8240.pdf](https://www.saveminnamurrariver.org/_files/ugd/233a65_61e1ba2a9f1d48c78b9b7479b84f8240.pdf)

9. These omissions and inaccuracies are continued in the documents and maps forming Boral's application for approval of the Stage 5B sand extraction under the EPBC Act. As just one example, Figure 3 in the current application documentation shows only one section of the SE Littoral Rainforest in the Stage 5B mine site area.
10. **It completely ignores a very large area of mature Littoral Rainforest, in practically pristine condition, west of and immediately adjoining (in fact, overhanging) its dredge pond site and extending from that site nearly to the Princes expressway and south to the riparian zone of the Minnamurra River. A significant section of this Littoral Rainforest, while unidentified by Boral and its consultants in this map (Figure 3), is within the 100 metre wide buffer zone of the dredge pond and post-mining 27-metre deep lake.**
11. In fact, this major area of pristine Littoral Rainforest immediately to the west of the Boral dredge pond clearing site is identified – *wrongly* - in Figure 2 of the documentation of Boral's EPBC Act approval application as "South Coast Sands Bangalay Forest". The Department of Environment's assessors should be alert to this and hopefully will realise that such mapping errors, inadvertent or otherwise, underestimate the area of the EPBC Act-listed Littoral Rainforest to be destroyed or modified at the Stage 5 site.
12. Figure 3 also fails to identify the fact that the areas of Bangalay Sand Forest it shows, include the interrelated EPBC Act-listed SE Littoral Rainforest ecological community, as explained above.
13. The Department's assessors should also note that the actual fieldwork or ground truthing of the environmental assessment documentation was very minimal at best in the first place and that it is outdated, having been undertaken over very short periods in April and May 2018 and in January 2019. This was before the ecosystems in the Stage 5B area in question were subject to the end of the seven-year drought and more importantly, before three subsequent years of the high rainfall weather event, La Nina, spurred the observed and very noticeable (to FOMR qualified personnel) of the regeneration and regrowth of the site's Littoral Rainforest in particular.
14. To emphasise the shortcomings of Boral's information presented to the Department in support of the company's current EPBC application, the Department should be alert to the fact that not only was the fieldwork for the environmental assessments very minimal in the first place, four to five years ago, the fieldwork or ground truthing for Boral's *Assessment of Significance*, dated 15 June 2023, was even more scanty. For example, the latest report presented to the Department states that "more recent field surveys were conducted on the 8th of March and the 12<sup>th</sup> of April 2023" and the minimal fauna surveys relied upon, conducted in 2019, were complemented by a spotlight transect "conducted at the proposed development site on the 12<sup>th</sup> of April 2023 between 6.15pm and 8.15pm." (!)
15. A single spotlighting survey on 12<sup>th</sup> of April between 6.15pm and 8.15pm would easily miss observing nocturnal animals, many of which do not always leave hollows or fly into their preferred feeding habitat until much later at night. Trail cameras should have been mounted on each tree for a number of nights to get an accurate picture of fauna utilising the habitat.
16. Littoral Rainforest trees of course occur within the Stage 5B site and will be cut and cleared but they do not get a mention in Boral's June 2023 environmental assessment presented to the Department.

17. Other facts omitted or obscured in Boral's 5 June 2023 assessment presented in support of the EPBC Act approval application, are:

- The endangered climbing plant, *Cynanchum elegans*, has been observed in the Littoral Rainforest on the site.
- The report gives the EPBC-listed Grey Headed Flying Fox a low rating for project impact but the removal of 38 large flowering Eucalyptus trees will mean a considerable loss of seasonal nectar and pollen that they have relied on for centuries.
- The report states that the vulnerable Ospreys are not known from within 10kms of the site but this is incorrect as they are regularly seen on the Minnamurra River, only 160 metres away, and on the coastline less than one kilometre away..
- No mention is made of the White Breasted Sea Eagle in relation to its observed roosting in trees right at the site and nesting in trees within Boral's Stage 5B area. (*FOMR personnel have photographed them there and only a week ago filmed a pair of Sea Eagles training their young over the site.*) *The Sea Eagle species is recorded as being negatively affected by disturbance which results in failed breeding.*
- No mention is made of the Wombat burrows observed on site and the fact that the Wombats will lose a large habitat once a lake replaces what is currently sand beneath mature trees.
- The report states that Littoral Rainforest will not be significantly affected by this proposed project but, of course, as shown above, *this is entirely incorrect.*
- **Additionally, this project will forever stop the existing Littoral Rainforest on the areas of the site cleared, from regenerating and its area expanding because of the presence of a large (7.5ha), 27-metres deep post-mining lake.**
- Parts of the Boral/Niche report are redundant because they list threatened flora and fauna species that are not known from the Illawarra. For example, *Melaleuca biconvexa* occurs in the Shoalhaven and nowhere in the Illawarra.
- Gang Gang Cockatoos are not known to frequent the lowland coastal environment in the Illawarra, the location of the subject site, but several pages of the MNES Significant Impact Assessment in the 15 June 2023 Boral/Niche report are devoted to the Gang Gang Cockatoo while the report completely omits any mention of the EPBC-listed Powerful Owls that are known to hunt in this habitat and nest in Bangalay Sand Forest tree hollows. Thirty-eight Bangalay trees are to be removed to make way for the temporary sand mine, together with their interrelated Littoral Rainforest.
- The report says that there will be 'edge effects' around the post-mining lake but makes no mention of the fact that the highly invasive Alligator Weed is likely to establish, *as has already happened*, in Boral's artificial lakes formed after the company's sand mining in past years just west of the proposed Stage 5B post-mining lake site.

**Inaccuracies, Understatements and Conflicts in Appendix 2 - MNES Significant Impact Assessment,**

**pages 48 to 56, of *Assessment of Significance – EPBC Referral***

(Niche Environment and Heritage for Boral Resources (NSW), 15 June 2023

**MNES Significant Impact Assessment of Endangered and Critically Endangered Ecological Communities – Littoral Rainforest and Coastal Vine Thickets of Eastern Australia (LR) (p. 50)**

18. The report's statement that no LR (0ha) will be directly impacted by the Stage 5B project is ***totally incorrect***. It is clear from the substantiated evidence presented earlier in this document, and from FOMR's field observations at the site over four years, that Littoral Rainforest interrelated with the Bangalay Sand Forest will be cleared (destroyed) to make way for the 7.5ha to 8.13ha Stage 5B dredge pit.

19. Additionally, while the Boral/Niche report **does not show it at all**, there is a large area of mature and pristine LR immediately to the west of the dredge pit site and parts of that LR actually overhang the site and LR regrowth is occurring on the actual site. These parts of the LR will also have to be cut and cleared to make way for the dredge pit excavation.
20. Further, as the report's Figure 3 shows, Boral's 100-metre wide dredge pit buffer (marked in red on Figure 3) actually takes in – includes - a large section of the mature and pristine Littoral Rainforest immediately surrounding the proposed dredge pit. It will be nearly impossible for Boral to avoid damage and destruction to this LF when preparing the dredge pit site and when building infrastructure such as the large flood bunds that are required around the dredge pit.
21. There will also be post-mining impacts on these adjoining areas of Littoral Rainforest because, on the west side, they will be practically on the shore of the large (7.5ha – 8.13ha), 27-metre deep lake that the exhausted dredge pit will become. The LF will therefore be unavoidably impacted and probably damaged and modified (as the Niche/Boral concedes) by the substantially changed drainage, groundwater and aquifer flows and atmospheric effects from the standing water body of the lake in the immediate vicinity.
22. The Boral/Niche reported distance of the LR from the 5B extraction pond (72m) is also totally incorrect and understated. There is substantial LR right along the western side of the proposed extraction site and LR actually overhangs the site and is starting to regrow in it **but the Boral/Niche report fails completely to identify it or show it in its vegetation maps of the broader project area (Figures 2 and 3).**
23. **The report's 8ha of 'Approximate extent (of LR) within broader project area' is, therefore, incorrect and understated.**
24. ***The 'Potential indirect impacts' on LR reported by the Boral/Niche report on its page 60 is an admission that the concerns of the Department of the Environment expressed to Boral (see page 5) will be realised:***

The report concedes that the critically endangered Littoral Rainforest, would, in fact, be impacted (and quite clearly, adversely): *The (Stage 5B sand mining proposal) "would have **potential indirect impacts** on surrounding LR caused by changes in hydrogeology, edge effects, weeds, erosion and changes in fire frequency."*

25. The report says, further, that the LR areas not cleared for the proposed development **"will be managed"**. How does a mining company and/or its occasional consultants, manage a critically endangered ecological community listed under the EPBC Act when it concedes, from the outset, that the development will have "potential indirect impacts on surrounding LR" caused by numerous uncontrollable changes in local natural systems affected/changed by the development itself and the actions of the developers?
26. The balance of the Boral/Niche report under the heading *Potential indirect impacts* (on LR) (p. 50) is meaningless and it is difficult to understand why it was included, except, perhaps, to pad and/or to confuse.
27. The Boral/Niche report states that "The proposed development is not likely to reduce the extent of LR" because, it states, that "Edge effects surrounding the proposed development are unlikely to cause a reduction of LR, given their proximity and the existing nature of the site being already partially cleared".

28. First, it is true that the site has, up to about 30 to 40 years ago, been partially cleared – but only in relatively small part and much of the area historically cleared has rapidly re-established under regenerating Littoral Rainforest which is now in various stages of maturity, not only in the previously cleared area but across the site, both interrelated with the Bangalay Sand Forest (to be cut and cleared) and as areas of exclusive LR.
29. The Boral/Niche report asserts throughout that the LR is not near the proposed extraction area and therefore the LR will not be affected but this, again, is *demonstrably totally incorrect*. As FOMR says earlier in this submission, there is a large area of practically pristine LR directly adjoining and overhanging the extraction area which the Boral/Niche report does not identify or map. Further, the Boral/Niche reports maps/figures show Boral's 100 metre-wide buffer zone around the extraction area actually running 100 metres inside nearly the entire Littoral Rainforest area immediately to the west of the extraction area/dredge pit area.
30. The Boral/Nich report indicates, again self-contradictorily, on page 50, that some LR *could* be destroyed or affected by the development or the development's effects could possibly reduce the extent of the LR ecological community. The reports states (p. 50): "One area of LR occurs 72m from the proposed development site with approximately 0.11ha of area that falls with 100m of the 5B dredge pond. It is not expected that this *reduced smaller area* of buffer will contribute to any reduction of extent for LR at the site." (?) This appears to show that areas of LR will be destroyed/badly impacted. Of course, this statement in the report also ignores the large area of LR which directly adjoins and overhangs the dredge pit area immediately to its west.
31. The Boral/Niche report is again *totally incorrect* when it states (p. 50, Criteria 2) "the development has no edge with LR." (!)
32. Again, the Boral/Niche report is incorrect when it states (p. 50) that "The habitat that would be cleared (for the Boral development) is not critical to the survival of LR at the locality." *Quite the contrary* - the LR to be cleared with the ecologically interrelated Bangalay Sand Forest, combined with the LR that will need to be cleared and will be directly impacted on the western edge of the extraction/dredge pit area and inside the 100 metre wide buffer zone, together with the edge effects/impacts on the LR which the report concedes, *will* (Criterion 3, p. 50) 'adversely affect habitat critical to the survival of an ecological community'.
33. **Overall, the development will not only destroy LR in various stages of regrowth but will forever eliminate and/or substantially reduce the opportunity for the entire area of this critically endangered and listed Littoral Rainforest ecosystem to re-establish, regrow and expand its area and dependant ecosystem.**
34. The Boral/Niche report's response at Criteria 4 on its page 50 is *entirely misleading and contradictory*. For example, consider this: The report states that "There will be no modification or destruction in the abiotic factors required for LR. Erosion and sedimentation will be managed through a Soil and Water Management Plan, however, before mitigation, the buffer distance to LR is expected to minimise impacts."
35. So here we have the Boral/Niche report stating, first, that there will be no modification or destruction of LR abiotic factors but, second, there *will be* erosion and sedimentation but these will be mitigated by a Management Plan after the adverse impacts are 'expected to be minimised' (*not prevented*) by "the buffer distance to LR."
36. The Boral/Niche report's response to Criterion 5 (p. 50) is simply *incorrect* again. First, the report offers no proof, scientific or otherwise, that: "There would not be a substantial

change in the species composition of the LR across the broader site caused by change to groundwater dynamics or edge effects”. In fact, this contradicts the same report’s statement, also on page 50, that “The proposal *would have* potential indirect impacts on surrounding LR caused by changes in hydrogeology, edge effects, weeds, erosion and changes in fire frequency.”(!)

37. Second, contrary to the report’s assertion, there will, in fact, be a substantial change in the species composition of LR caused by the cutting and clearing of at least 7.5ha of the interrelated Bangalay Sand Forest on the development site.

**MNES Significant Impact Assessment of Endangered and Critically Endangered Ecological Communities – Coastal Swamp Oak (*Casuarina glauca*) Forest of South-east Queensland and New South Wales (SOFF) (p. 48)**

38. Despite what the Boral/Niche report of 15 June 2023 states, *there will be impacts* on the SOFF which, as the report says, is “known from approximately 98 metres from the 5B extraction pond.”

Consider the following in relation to the SOFF:

39. The Boral/Niche report says that the “SOFF is a groundwater-dependent ecosystem and also a coastal wetland and has been extensively mapped and researched for its dependency on groundwater to survive. The groundwater occurrence below the proposed development site is alluvial groundwater that is unconfined and relatively shallow (1 – 4m in depth) and fresh...”.
40. The SOFF will undoubtedly be impacted, probably adversely, by gross disruption/alteration/modification to both the groundwater and the surface water across and beyond the entire project area caused by the clearing of at least 7.5ha of native vegetation, the dredging of an equally large pit to a depth of 27 metres and the establishment of a post-mining permanent artificial lake, also about 27 metres deep, and subject to flooding and substantial flood and high rainfall event outflows of surface water.
41. The Boral/Niche report relies heavily on the NSW Planning Assessment Report (2019) prepared by the NSW Department of Planning, Industry and Environment for the NSW Independent Planning Commission (IPC). This NSW Department of Planning Report is itself based very heavily on an earlier Boral Limited consultant’s report. The NSW Planning Department’s report has been almost entirely discredited as full of inaccuracies, inadequacies and omissions as set out in the report at this link:

[https://www.saveminnamurrariver.org/\\_files/ugd/233a65\\_61e1ba2a9f1d48c78b9b7479b84f8240.pdf](https://www.saveminnamurrariver.org/_files/ugd/233a65_61e1ba2a9f1d48c78b9b7479b84f8240.pdf)

42. This thoroughly discredited (and now outdated) NSW department report asserted, without any evidence, scientific or otherwise, that “As the modification (the Boral development project) would not result in any material drawdown from the groundwater system that feeds the wetland and sedimentation risks could be appropriately managed through engineered flood bunds, the Department considers it unlikely that the modification would materially affect the hydrological regime of the local area or the water resources feeding the wetlands”. ***This was and is an entirely unsubstantiated and unsupported assertion.***
43. The Boral/Niche report (p. 48) states that: The IPC “independently reviewed the above findings”. That, too, is *factually incorrect*. The IPC had no capacity to review or



investigate; it merely *considered* the NSW Department of Planning (now discredited) report and “agreed with the Department’s assessment”.

44. The fact remains that the Boral 5B development will inevitably and severely impact groundwater and surface water flows throughout and adjoining the site, including the large areas of SOFF, as a result of the complete clearing of native vegetation from a large area of the site and the digging of a 7.5 hectare permanent lake 27-metres deep, in a riverine floodplain only 160m from the Minnamurra River.

**45. As a Commonwealth department of State responsible for administering and enforcing the provisions of the EPBC Act, the Department of the Environment’s acceptance of the Boral/Niche report’s mere unproven assertions, with an absence of scientific evidence, that the SOFF of the 5B project area and surrounding area will be unimpacted, unaffected or modified in any way, would open the Department to justified accusations of failing to uphold its legislated responsibilities.**

#### **MNES Significant Impact Assessment of Endangered and Critically Endangered Ecological Communities – Subtropical and Temperate Coastal Saltmarsh (CS) (p. 52)**

46. While asserting on its page 50 that there would no groundwater effects of the 5B project on another endangered and listed ecological community, the Coastal Swamp Oak Forest of South-east Queensland and NSW (SOFF), in Boral’s 5B project area, the same Boral/Niche report contradicts itself on page 52 in relation to the Coastal Saltmarsh EEC where it concedes that: “The proposal (5B project) would have potential indirect impacts on surrounding CS listed under the EPBC Act as identified *primarily through possible groundwater effects*.” In other words, the report says in one place that the subject project will have no groundwater effects but in another place, a few pages on, states that there *will be* groundwater effects.

47. In fact, the entire Boral/Niche report on the 5B project’s impacts on the Coastal Saltmarsh EEC is riven with total inaccuracies and statements that are simply untrue and misleading. In this regard, the report lacks any scientific substantiation at all. **It cannot possibly be relied on by anyone, let alone a Commonwealth Government Department.**

48. Just a few examples of the report’s inaccuracies and misleading nature - despite what the report says:

- There have been no scientific or fieldwork reviews, independent or otherwise, of the basic hydrogeological studies conducted by Boral four to five years ago;
- The NSW Independent Planning Commission (the IPC) **did not** conduct any review of the hydrogeological studies, it merely *examined* information provided to it by the NSW Department of Planning in a now discredited report derived exclusively from desk studies and from Boral consultants’ reports.
- The IPC **did not have** any review or investigative capacity; it merely examined the NSW Department of Planning report and either rejected or (in part) accepted what was in the (defective) report.

49. The report says flood bunding and swales will be constructed to control the erosion and sedimentation which it says will occur but the report takes no account of the fact that bunding does not and will not control groundwater, flows of which will be substantially impacted and modified through the project site and beyond.

50. The report states that “the (5B) works will include weed management” but makes no mention of the fact that herbicides will be used to do this, contrary to Criterion 7 of the Impact Assessment for (CS) on page 53 of the report.
- 51. There is only one conclusion that can be drawn from the Boral/Niche report’s assessment of the impact of Boral’s 5B project on CS and that conclusion is: the project will undoubtedly directly and indirectly adversely impact and/or modify the Coastal Saltmarsh of the project area and adjoining it.**
52. It should be noted also, that Boral Limited has not been fully forthcoming in its documentation and reports to the Department of the Environment on this matter. Boral reports only a few Penalty Infringement Notices (PINs) in relation to its activities. However, FOMR’s searches of Boral annual reports and other documents shows that Boral has transgressed a multitude of environmental laws a multitude of times in the past decade or so.
53. One such transgression that Boral has *not* reported to the Commonwealth in its current EPBC Act approval application documentation, is that last year, 2022, it was held by the NSW Environment Protection Authority (EPA) to be responsible for a major sand pollution incident in a creek, Rocklow Creek, and a surrounding Kiama Municipal Council wetlands reserve, Ruth Deveney Reserve. At that time, Boral was issued with a clean-up order by the EPA. It should also be noted that this pollution incident was only about a 800 metres from Boral’s highly biodiverse 5B project site, the subject of the company’s application for EPBC Act approval to mine.

### **The Precautionary Principle**

54. As the assessors with the Department of the Environment will know, the precautionary principle, under section 391(2) of the EPBC Act, is that 'lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage'.
55. The application of the precautionary principle under the EPBC Act, and the need to take precautionary measures, is triggered by the satisfaction of two (cumulative) conditions:
- i. a threat of serious or irreversible environmental damage (‘first condition precedent’); and
  - ii. scientific uncertainty as to the environmental damage (‘**second condition precedent**’).
56. **FOMR Inc. submits that at the very minimum, the Precautionary Principle of the EPBC Act must be applied in the case of the proposed Boral development of sand mining at the 5B site at Dunmore, NSW.** This is because there is absolutely no doubt, as shown in this submission, that the critically endangered ecological communities in and adjoining the project area will be destroyed and/or substantially impacted/modified by the project works, to the detriment in various degrees of the EECs in question if the Minister or Minister’s delegate approves the project.
57. Nothing in the documentation and reports presented by Boral Limited and its consultants to the Commonwealth Department of the Environment in support of approval of the project under the EPBC Act, supports an approval decision.

58. In fact, to the contrary, the submitted documentation and reports strongly indicate, with their inaccuracies and contradictions, that ***there will be*** major impacts from the 5B project on the EECs in question, contrary to the provisions of the EPBC Act.
59. **In summary**, despite Boral Limited's many assertions to the contrary, both in its current EPBC Act referral application and in numerous documented instances since 2020, all current evidence shows that Boral simply cannot avoid highly significant impacts, including totally destructive impacts, on the listed and critically endangered MNES ecological communities at Boral's 5B site, Dunmore, NSW.
60. It is also now practically certain, given new and changed evidence, that the NSW Independent Planning Commission, if asked now to consider the project on which it deliberated in 2020, **it would not approve it.**

### **Section 10 of ATSIHP Act and Consultant's Recommendation**

61. Finally, the Department of the Environment should be aware that the Minister already has the power and justification for preventing any proposed development in the 5B area at Dunmore, in addition to any powers she may exercise under the EPBC Act.
62. Both the Minister and the Department have received a report from an expert consultant appointed by the Commonwealth, that the landscape and cultural values across the entire 5B site proposed for a Boral sand mine are so high that they fully justify the Minister's declaration of the area as a Significant Aboriginal Area under Section 10 of the Commonwealth's *Aboriginal and Torres Strait Islander Heritage Protection Act*. (See the report and recommendation of the Commonwealth's consultant, Dr Brendan Corrigan, at: [https://www.saveminnamurrariver.org/\\_files/ugd/233a65\\_a5f29d04d5e644939a5f9a3f09c8bf10.pdf](https://www.saveminnamurrariver.org/_files/ugd/233a65_a5f29d04d5e644939a5f9a3f09c8bf10.pdf))

- **Will Chyra**  
**Chair**  
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3 July 2023

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