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TRANSCRIPT OF PROCEEDINGS

TRANSCRIPT IN CONFIDENCE

O/N H-1300479

INDEPENDENT PLANNING COMMISSION

MEETING WITH KIAMA MUNICIPAL COUNCIL

RE: DUNMORE LAKES SAND PROJECT MODIFICATION 2

PROJECT #: D608/20

PANEL: **DIANE LEESON (CHAIR)**
PETER COCHRANE
BRAD JAMES
ALISON HILL
STEPHEN BARRY

COUNCIL: **JESSICA RIPPON**
BYRON ROBINSON
KATHY RICE

LOCATION: **VIA VIDEOCONFERENCE**

DATE: **10.05 AM, FRIDAY, 9 OCTOBER 2020**

THIS PROCEEDING WAS CONDUCTED BY VIDEO CONFERENCE

MS D. LEESON: Good morning and welcome. Before we begin, I would like to
5 acknowledge the traditional owners of the land on which we meet. I would also like
to pay my respects to their elders, past and present, and to the elders from other
communities who may be here today. Welcome to the meeting today. The Dunmore
Lakes Sand Project is an established dredged sand extraction operation at Dunmore
in the Illawarra region of New South Wales. It is owned by Dunmore Sand & Soil
10 Proprietary Limited, which is a wholly-owned subsidiary of Boral Resources New
South Wales Proprietary Limited. Dunmore Sand & Soil is seeking approval to
extract sand from two new extraction areas, known as stages 5A to the north and 5B
to the south, within the existing approved life of the operations.

15 The project is located within Shellharbour Local Government Area. My name is
Dianne Leeson. I'm the chair of this IPC panel. Joining me is fellow commissioner
Peter Cochrane. Brad James, Steve Barry and Alison Hill from the Office of the
Commission are also in attendance. In the interests of openness and transparency
and to ensure the full capture of information, today's meeting is being recorded and a
20 full transcript will be produced and made available on the commission's website.
This meeting is one part of the commission's decision-making process. It is taking
place at the preliminary stage of the process and will form one of several sources of
information upon which the commission will base its decision.

25 It is important for commissioners to ask questions of attendees and to clarify issues
whenever we consider it appropriate. If you are asked a question and not in a
position to answer, please feel free to take the question on notice and provide any
additional information in writing, which we will then put up on our website. I
request that all members here today introduce themselves before speaking for the
30 first time and for all members to ensure that they do not speak over the top of each
other to ensure accuracy of the transcript. Given that we have – we don't have visual
contact, it's difficult for Auscript to do it if we – to accurately transcribe if we don't
introduce ourselves, so if I could just ask you to do that, it will good. And we will
now begin.

35 So welcome, council and staff. We thought our approach for today's meeting would
be to have council represent their concerns and issues relating to the proposal and we
will take some – we will then bring on some questions from ourselves about
particular matters as we go through. So we would really like to hear from Kiama in
40 the first instance as to your current concerns or issues with the project. And I will
hand to council. I'm not quite sure how you want to manage it at your end.

MS J. RIPPON: We will probably – hi, my name's Jessica Rippon. I'm the
Director of Environmental Services. I'm here at council, so we have myself and
45 Byron and Councillor Kathy Rice. We are going to commence with Councillor Rice,
and she was going to provide an overview of some of the concerns that have been

raised by the community and also by council. And then I will hand over to Byron, who is going to give us a little bit of an overview of some of the concerns that he is aware of and I will finish off with anything that hasn't already been covered, if there's anything that remains. I know that we've provided two submissions in writing already to this proposal, so most of our concerns should already be known. But we're happy to go through them and certainly answer any questions. So, Councillor Rice, I might hand over to you, if that's okay.

MS LEESON: Okay. And just we do have the two submissions of council with us, so thank you for that. Councillor Rice.

MS RICE: Okay. Thank you very much. I'm not quite sure how long I had to speak. I've written some notes based on my reading of the assessment report and also on conversations with the community, so please interrupt me to ask questions if you need to.

MS LEESON: Thank you.

MS RICE: So – so the Department of Planning, Industry and Environment's Dunmore Lakes Modification 2 Assessment Report considers that this project's acceptably regarded as a modification, because, in their eyes, it doesn't create a radical transformation of the project. It's a different part of the same sand resource. The process and procedures remain much the same and environmental impacts can generally be managed, rather than prevented. However, there's an overall community concern that it's not just a modification of the original approval and, as it is no longer on Boral's land, it has taken a substantial step eastwards towards the Minnamurra River and now impacts different ecosystems within the protected coastal management area.

My concerns, and those of the community members who have spoken with me, relate mostly to the environmental and Aboriginal cultural heritage impacts of this proposal. Naturally, the assessment report is designed to be persuasive and, in doing so, it justifies itself by highlighting one of the four goals of the Illawarra Shoalhaven Regional Plan, a region that makes appropriate use of agricultural and resource lands. And the report stresses one of its relevant actions:

Action 4.2.1: Sequence release areas, in the vicinity of mineral resources, to allow the continuation of working extraction activities.

But the report neglects to mention another equally important of those four regional plan goals; that of being a region that protects and enhances its natural environment. And it doesn't go on to consider two of the relevant actions in relation to that: protect the region's biodiversity corridors in local planning controls and create a consistent approach to protect important riparian areas in planning and development controls. It's mostly stage 5B that is inconsistent with the regional plan's environmental goals and actions and also inconsistent with some of the objectives of the New South Wales' Coastal Management Act that I will discuss later.

Whilst the department recognises the value of the E3 land in the southwestern portion of the 5B extraction area and recommends that Boral avoids any development in this area, it has stopped short of seeing the overall picture. To the south, 5Bs E3 land gives way to larger extensive land zoned E3 and the significance of the corridor between 5B and these zones and towards the land further east has been missed. In considering the proposal under the EP&A Act, it is stated that the modification doesn't significantly increase the approved environmental impacts. This is not true. The environmental impacts have increased due to the stage 5 sites now abutting the different Minnamurra River ecosystems.

These impacts are different to what has been approved, because they involved different species, corridors and ecosystems. The department's stance places economic and social considerations, that is building industry and employing 10 people, higher than environmental and Indigenous cultural considerations. The Dunmore operations may traditionally supply seven and a half per cent of the sand used in the Sydney construction industry, but that's no reason to seek to approve it at all cost, rather than trying to find and exploit other less environmentally-sensitive areas. In discussing impact on threatened species and ecological communities, the report falsely states that the final 5B landform will provide enhanced resources for water birds in the long term, whilst the reality is that the 5B pond will remain deep water and not include wading and foraging areas until and if long-term assessment ever shows that its water quality is suitable for overflow into the Minnamurra River.

In general, the environmental impact of stage 5B operations have been under-considered throughout the assessment report. Two objectives of the New South Wales' Coastal Management Act 2016 are:

...to protect coastal wetlands and littoral rainforests in their natural state, including their biological diversity and ecosystem integrity –

and:

...to improve the resilience of coastal wetlands and littoral rainforests to the impacts of climate change, including opportunities for migration.

The impact that the 5B stage of this project will have on vegetation is considerable, as it further disrupts the fragile corridor connecting the riparian vegetation of the Minnamurra River. With stage 5B 100 metres from the edge of the protected wetland area, it is blatantly misleading to say that no extraction would occur within the mapped wetland areas or the proximity area for the coastal wetlands buffer while ignoring to mention the indirect impact that vegetation removal and barrier creation will have on those areas. Throughout the 5B zone, there's seven-and-a-half hectares of native vegetation to be cleared, including four-and-a-half hectares of the Bangalay Sand Forest, which is an endangered ecological community under the Biodiversity Conservation Act.

The Bangalay trees are the only hollow-bearing variety of trees amongst the vegetation community. There are 38 of these hollow-bearing trees and four hollow-bearing stags proposed for removal in stage 5B, which is pretty much of the entirety of vegetation that occupies the 5B area. The report states that biodiversity impacts were designed to be minimised by focusing development on land that had previously been cleared for agricultural purposes. In considering the EP&A Act, the department notes that the proposed modification has been designed to limit vegetation clearing where practical and is not seeking to extract resources from areas of high-quality remnant vegetation.

This statement totally misrepresents the fact that the mere existence of these 42 hollow-bearing trees attests to their high quality environmental significance and is the reason why they have been retained as paddock trees over time. Removing them does not meet the EP&A objective of protecting the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats. The suggested mitigation for the removal of Bangalay vegetation is that Boral prepares – provides a biodiversity offset strategy, although approval for the project is being recommended in advance of any site being confirmed.

Boral plans to relocate the felled tree hollows and install nest boxes. However, it is well-established that these procedures, particularly nest boxes, do not adequately replace natural hollows for the breeding purposes of many native species. The significance of the Dunmore Bangalay endangered ecological community is downplayed by referring to the 6300 hectares of Bangalay Sand Forest that remain between Sydney and the Victorian border. How will these remote communities help the survival of species dispossessed by the removal of the four-and-a-half hectares at Dunmore? Further, although the report states that the six threatened species recorded in field surveys did not appear to be breeding in the area, the rarity of and competition for tree hollows will confirm their use by other species that will become displaced, should the project go ahead.

No reference is made to the impact of sea level rise on the protected mangrove and saltmarsh communities of the Minnamurra. This is a point that has been raised by both council and community members, using local, evidence-based data that mangroves and their peripheral saltmarsh are already retreating westwards in this area. A recommended action of the federal Department of Agricultural, Water and the Environment is to identify and detect areas where coastal habitats can retreat with sea level rise. The low-lying land of the stage 5B area is one such zone where this can and should occur, rather than presenting a barrier to migration in the form of the bunded perimeter of 5Bs deep-water pond.

Now, turning briefly to an environmental consideration of stage 5A, I'm concerned that there's a reasonable probability that the stage 5A works will have an ongoing negative impact on the vegetation in this area. This is due to an agreement made with the landowner to rehabilitate back to pasture after the year or so extraction work in this location. It is stated that trees will be removed within the curtilage of

Dunmore House for the development of 5A and that trees won't be planted in the short – for the short-term screening of the works from Riverside Drive. The return to pasture rehabilitation agreement is being used in opposition to screening and revegetation and this agreement should be modified to take the longer term
5 environmental interest into account.

There has been local disquiet about the impact of sand mining on traditional Aboriginal land and in relation to the sustainable management of Aboriginal cultural heritage, this proposal falls far short. Approval is being recommended by the
10 department, whilst admitting that sufficient knowledge is still being developed and there is the assumption that digging out and handing over artefacts in a very significant historic site is a sustainable way of managing Aboriginal cultural heritage. I have had several representations from the local Aboriginal community on this matter. Heritage New South Wales encouraged Boral to further consider the heritage
15 impacts of their proposal and requested that Boral confirm the outcomes of their consultation with the Illawarra Local Aboriginal Lands Council regarding the additional testing recommended by Heritage New South Wales.

Boral confirmed that the testing took place with Aboriginal representatives present and that the resultant report was distributed to them, but it appears the outcomes of such consultation was that no comments were received by Boral in response to the report. It is implied, however, that there was some commentary coming to the
20 department from the local Aboriginal community and certainly many of their signatures were among the 5000 on the petition opposing the sand mines that was delivered to the state parliament by MLC Justin Field. What I have heard is that the perspective of the Illawarra Local Aboriginal Land Council is that excavation is disrespectful on this piece of sacred land, and from this I can assume that the collecting and handing over of relics as proposed by Boral is not a favourable
25 outcome in the eyes of the Land Council.

The Minnamurra River is of high significance to the local and Aboriginal community, with spiritual values associated with it as the burial place of King Woolongoolow, king of the tribes from Wollongong to Nowra. There are 27
35 Aboriginal cultural heritage sites within a one-kilometre search radius of the stage 5B excavation zone that are registered with the New South Wales Aboriginal Heritage Information Management System. Three of these sites are proposed to be disturbed by excavations for stage 5B of this project, with two of these considered of most importance. The abundance of relics that have already been found in test pits here is indicative of the high usage of the area by Aboriginal people in the past.

The stage 5B site is also highly proximal to the site of the 1818 Minnamurra Massacre, as determined by University of Newcastle Professor Lyndall Ryan and recognised by Kiama Council. Both Boral and the department acknowledge that sufficient knowledge of this area is yet to be developed and, as so, its preservation
40 should be upheld as a precautionary measure. It is a site of shared history that deserves respect. I'm sure that there will be a strong community response to the public hearing to be held on 28 October and to the further opportunity to make
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submissions on this matter. I hope that their local understanding will be carefully considered, so that this matter is seen more clearly as offering only very short-term economic gain at a significant cost to the ecologically of the Minnamurra River and to the people of this area.

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MS LEESON: Thank you, Kathy. Peter, I'll open to you, first, if you have any questions for Kathy, before we sort of get too far into it, and then we'll ask Byron to talk as well. So are there any questions you'd like to follow up with on, Peter?

10 MR COCHRANE: Just – Peter Cochrane, commissioner. Thank you very much for your presentation, councillor. Just a quick question on the Bangalay Sand Forest, if the boundaries were to shift of the extraction area, would that satisfy some of the concerns about the remaining hollow-bearing trees? I note that the boundary of the proposed extraction area, when we went on a site visit, does align pretty closely with
15 the edge of the more intact sand forest, ie, not just the paddocks and the paddock trees, but the more intact forest that's zoned as E3. Do you think there's any room to move those boundaries or is the – based largely on your comments about Aboriginal heritage, do you think the whole area of 5B is unacceptable?

20 MS RICE: Look, I feel like the whole area is 5B – of 5B is very sensitive for both of those regions. And it appears that in trying not to site this into the forest, the intention is to protect trees, but what's happened there is that those trees that are left, which are going to proposed to be disposed of are the hollow-bearing trees. So the only way that it could be re-sited would be to perhaps make it smaller, but then that
25 has still got the impact on the Aboriginal area. And because, in total, the extent of all of the proposal here is only two to three years of sand, reducing the size of that 5B area probably moves towards making it economically unviable. So it – if it could involve less hollow-bearing trees, it would probably be better, but overall I think it's probably not an appropriate site for it in that place.

30

MS RICE: All right. Thank you.

MS LEESON: Kathy, can I just ask you to expand a little more on the sea level rise issue and the retreat of mangroves and I think – did you say saltmarsh or I might
35 have read that somewhere else.

MS RICE: That's based on a local research paper. Now, I don't have the authors of that currently in mind. Byron may know the authors of the studies that have been done there, but what has been observed is that the mangroves and saltmarshes along
40 the Minnamurra River are moving westwards. And with this stage 5B pond being only 100 metres from that area, it creates a barrier to migration that has begun already and now we're – sea rises are unrelentless and will continue over time, but ultimately the area, the whole of the 5B area, may well become reclaimed by saltmarsh, which is another endangered ecological community.

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So to paraphrase, if the 5B extraction area didn't go ahead, you would anticipate in the longer term that there could be a westward retreat of both sort of mangrove and

saltmarsh onto the 5B area. That's right, because that's a possibility at the moment with the land as it has been left, but if you then impose the bunding and the deep pond of the 5B extraction area onto that, that's a barrier to that migration.

5 MS LEESON: Okay. No, that clears it up for me. Thank you.

MS RICE:

10 MS LEESON: And you referenced the University of Newcastle academic. I think that was Lyndall - - -

MS RICE: Lyndall Ryan.

15 MS LEESON: - - - Ryan. Thank you.

MS RICE: And, yes, Byron may well know the academics who wrote that other paper.

20 MS LEESON: All right. We - - -

MR B. ROBINSON: There's a couple of papers around. Tom Doyle and there's a fair bit of research going on through the University of Wollongong, which we don't always have access to, because we find out about this research that's going either half – partway through some of the research or after someone might mention in
25 conversation to us, “Yes, we've got a thesis that's going on.” There's quite a bit of research. Minnamurra River is one of the focus rivers of the University of Wollongong with their research and they've got long-term monitoring in those wetlands on that side of the river, very close to the proposed 5B extraction area. That – there's – Kerrylee Rogers from the University of Wollongong has got a long-
30 term sediment accretion-type study going in that area, as well as – there's a – there's research on the modelling of the mangroves and the saltmarsh with – under different sea level rise scenarios.

35 MS LEESON: Thank you.

MR ROBINSON: We can do – I do have a few – I do have a copy of those – the – I think the research Kathy's referring to somewhere around here. We've also got the Minnamurra Coastal Zone Management Plan, which did a very sort of – I don't know what you would – it was more of a bathtub analysis based on the point, the sea level
40 rise policy levels from the New South Wales Government, which was then rescinded. So it was very rudimentary. It wasn't particularly detailed or modelled over a number of scenarios. It was basically a line on a map, but we are intending – come 2021, we're going to have to revise our Minnamurra River Coastal Zone Management Plan under the new Coastal Management Act framework, which will
45 require us to do some detailed modelling on the impacts of sea level rise, inundation on those wetland communities and their potential migration and potential barriers to the migration of those wetland communities.

So that research and that modelling is intended to be undertaken in more detail in the near future. But as Kathy mentioned, I think there wasn't particularly much reference to that sort of stuff in – from what I can see within the response to submissions, considering that was raised as a potential issue.

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MS LEESON: Okay. Thank you, Byron.

MS RICE: I've just found my notes here, and I've got the titles of two of the articles written, if you'd like those.

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MS LEESON: That would be helpful. Thanks, Kathy.

MS RICE: One of them is called An Integrated Approach to Assess the Vulnerability of Mangrove and Saltmarsh to Sea Level Rise at Minnamurra New South Wales. And that's by Thomas Oliver. So did you get that or did I read too fast?

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MS LEESON: We can pick that up, that's fine. You've said it. We can get it straight off the transcript if we

20

MS RICE: Okay. And the other one is Predicting the Response of Coastal Wetlands of South-Eastern Australia to Sea Level Rise, and that's by Kerrylee Rogers and Neil Saintilan.

25

MS LEESON: Okay. Thank you. If I can then talk about – maybe Byron. You're going to – Byron, are you going to talk about the depth of the proposed 5B pond and water quality? Are you going to talk to that?

30

MR ROBINSON: Not particularly. I think Kathy has done a pretty comprehensive job of summarising the major concerns. I suppose the major concerns from my perspective were, yes, the Bangalay Sand Forest and its particular significance in terms of being an endangered ecological community. And I'm not sure – I can't quite recall what Kathy's reference to the entire Bangalay Sand Forest – I can't remember the hectares, but – reference that she made, but from the Illawarra Biodiversity Strategy, I think it's across the Illawarra region. When we look at that, it was identified that there was only 234 hectares of the Bangalay Sand Forest remaining in the Illawarra region, so it's a community that's under pressure and the cumulative impact of developments and the loss of these areas is not insignificant, I suppose, because there is a – the – it's an endangered ecological community for a region. That's because it's – of the reduction in its previous extent.

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MS LEESON: Thanks, Byron. I mean, my question was more around – or it was going to be around the depth of the pond and water quality.

45

MR ROBINSON: Yes.

MS LEESON: And, Kathy, you made reference to some wading birds, so I wasn't quite sure from that – well, I would ask you to, I suppose, expand a little. If the proposal was for a shallower pond or a change to the profiling around the edges to provide for wading-bird habitat, does that go some ways to addressing issues from a council perspective?

MS RICE: The ponds are going to be bunded and protected from flood impact, because initially the water is designated as unsuitable to mix into the Minnamurra River to save seagrasses and the fishing – fish nurseries. So the – that pond is designed – apparently under the one-in-100-year flood scenario, there is going to be a – there will be an overflow. There is an area where there would be an overflow into the Minnamurra River. But otherwise the description of that pond is that it's going to be very highly bunded and protected from access to other water bodies or through groundwater in the area. And so it's going to be a – it's not going to have shallow edges. It's not designed to have shallow edges around it. It's basically a deep-water pond.

MS LEESON: There is an intention, I think, to, over a period of time, and subject to water quality - - -

MS RICE: Subject to water quality.

MS LEESON: - - - the bunding being removed over a period of time

MS RICE: But those – sorry. Yes. It does say “over a period of time,” but when you read about the treatment, you know, the treatment is pretty severe to make sure that that water is insulated from any other waters in the area. And so it's going to be a very long period of time before wading birds can come back to that, but it's not going to be wading birds that are displaced by the removal of the Bangalay Sand Forest. And so you're not replacing like with like anyway with the destruction that goes on there in the 5B zone.

MS LEESON: With – leaving a water body there is definitely not a like for like rehabilitation.

MS RICE: Absolutely, and we've got plenty of water around anyway. We've got the other lakes that have been there, so we're not short of the – well, you know, habitat for wading birds, but we are short of the tree hollows and the nesting sites for a whole lot of other arboreal inhabitants.

MS LEESON: While we're on groundwater, can I take us back to the stage – the proposed stage 5A groundwater issues and concerns of council. Council is concerned, I think, on a number of levels and I'd just like to unpack that a little. I think the first issue is a question around leachate in the landfill at the recycling – underneath the recycling centre and changes in hydrology impacting that. The second issue, I think, is around the backfill thatand potential for acid sulphate

soils and the third issue I think is around – and I'm more understand council's position on the first two matters.

5 I'm less clear on council's concern around the water quality volume to Rocklow
Creek and the Minnamurra River estuary and whether the concern is that
groundwater movement will go through the landfill at a change rate and therefore
have leachate impacting those two waterbodies. Can you explain a little more or
expand a little more what council's concern is around the Rocklow Creek and the
10 Minnamurra estuary re groundwater?

15 MR ROBINSON: I think because we've got the legacy landfill there and we have
got some fairly high in ammonia leachate legacy groundwater issues that we're
trying to deal with under our EPA license we're currently doing a remediation
strategy where we're slowly pumping that groundwater out and trying to aerate the
ammonia out of it but our concern was that the potential for the – without being able
to actually – we're not hydrologists and we don't have that skillset within our council
obviously but our concern was that any activity in that area which involved either
mobilising groundwater or increased surface water flows could, in fact, either speed
up or change the direction of that leachate and, hence, impact the groundwater
20 quality in the area so, I mean, it's a very difficult thing to try and predict.

We have to, I suppose, to a certain degree defer the expertise within the Department
of Planning and Industry and the flood and groundwater sections which, in their
25 reviews of the hydrological – the proponents' consultant hydrologists and their
assessments that – they don't predict that there will be any mobilisation or increase
of the groundwater or mobilisation of that leachate, so, yes, our concern is that that
could potentially happen, I suppose, and there will need to be some pretty good
monitoring in place if it goes ahead to ensure that we're not seeing that.

30 MS LEESON: I can certainly understand that council would not want to have its
remediation program under the landfill compromised in any way. I think that's an
entirely reasonable position to have, so, yes.

35 MR RIPPON: Yes, I think to add to that, as well, it relates to – as part of your
submission, we talked about some potential conditions that certainly, we've
recommended the refusal, obviously, but – and a lot of that is around of the
monitoring and gathering that information. In our understanding, we don't believe
that that information has been fully unpacked yet, in terms of what the impacts would
be. They're not necessarily known, so as Byron is saying, we don't necessarily know
40 what they are and we believe that the applicant should have done that work or
definitely needs to do that work prior to any operational consent being provided so
that we can fully understand what the impacts of groundwater and changing flows
may be, how that impacts on our potential program for the tip site but also how that
then impacts on the broader river ecosystem and other impacts that it may occur
45 from, again, the backfilling of the ponds and also the extraction of a number of those
components that may also end up in the river, so, certainly, from our understanding,
we don't believe that that work has been adequately done. This further work needs

to be occurring prior to approval and that's outlined in the potential conditions of consent should the Commission want to proceed down that path.

UNIDENTIFIED MALE: Thanks, Jessica.

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MS LEESON: I had no more questions on the basis of what Kathy had taken us through and some of the subsequent from yourself, Jessica and Byron. Peter, do you have any other questions at the moment or we'll continue with council to add any further comments that they might like to?

10

MR COCHRANE: Just a question on sea level rise and the coastal zone hazard as I understand it, most of the risks really go to so far, at least, have been right on the coast, rather than reaching up into the river and estuarine systems. Is there any – apart from the two articles or the second article you referred to, councillor, are there any other documents that you could point us to that indicate where the concerns are for this – allowing for westward expansion or upstream expansion of coastal ecosystems? Apart from constraints on development actually on the coast, are there other documents or planning instruments that you could point us to that relate to that particular issue, a planning for sort of inward migration of coastal ecosystems?

20

MR ROBINSON: Specifically, probably not for the Minnamurra River but I believe there's a body of work that's underway. It's either Eurobodalla or Bega Valley where they're mapping the wetlands and the potential through – it's based on the elevations that those obviously – the saltmarsh and the mangroves – those elevations that they occur at. With sea level rise and that sort of thing it's extrapolated out that way and it – but it would have – I would have to – probably the best people to source that from would be the Department of Planning, Infrastructure and the Environment, the coast and – I forget – are they the biodiversity section of DPIE now? The coast and estuary - - -

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MR COCHRANE: Yes.

MR ROBINSON: - - - section, basically, for the south coast region.

35

MR COCHRANE: Okay.

MR RIPPON: Sorry, I guess the short of that is, no, there isn't any specific cellular counts that's done around Minnamurra River. We've only focused over the coast for now but certainly I know Shoalhaven has also done private work around similar charts of environments and so certainly we could extrapolate out that information and apply it in this case. That hasn't been done but it could be done.

40

MR COCHRANE: Okay. All right. Thank you.

45

MS RICE: It's also really valuable to just look at the geographic location of where we are. We're very close to the mouth of the Minnamurra River here. And Minnamurra River is a tidal river and so the river is definitely going to respond to sea

level rise because, you know, we're still in the tidal zone at that point and retreat is something that's talked about in planning. It's talked about in relation to ecology, too – is that we know that we can't continue using the shores as close to shores as we have over time. We need to be planning to shift developments back and to let nature shift itself back, too, as it needs to in relation to increased sea level but I hope Jessica there and Byron have been able to lead you to some other studies.

MR COCHRANE: That's very helpful. Thank you very much.

10 MR ROBINSON: There is – sorry, there is reference – and I may be able to – if I can – I'm not sure I can share my screen.

MR JAMES: One sec, Byron, I'll just - - -

15 MR ROBINSON: Sorry, I did save it.

MR JAMES: Sorry, here we go. You should be able to, actually.

20 MS RICE: Even if he doesn't have a camera? Like, we can't see Byron.

MR ROBINSON: Yes, you usually can but that's all right. I don't think it's allowing me to do so. It's all right. I was going to share the section of the Minnamurra Coastal Zone Management Plan which references the Oliver – and it's got particular reference to that back area that is directly adjoining the proposed 5B site, so - - -

30 MS LEESON: I suggest that you give that reference point through to Brad at the Commission and we can have a look at it from there. It'll probably be simpler than trying to get something up on - - -

MR ROBINSON: Yes. Yes.

35 MS LEESON: - - - screen today. Can I just take us back to flooding impacts? We remember Shellharbour Council last week and in the report it's saying that surface water – there could be an additional 16 millimetres flood across Riverside Drive.

MR ROBINSON: Yes.

40 MS LEESON: The question is had is does Riverside Drive currently flood? If it does, is it ever closed and is another 16 mils – I think it might be the one in 100 – I can't remember, that the annual incidents – but is an additional 16 millimetres likely to force the closure of Riverside Drive? Has council had a look at any of that, so far as the flood analysis was concerned?

45 MR ROBINSON: I probably need to take that on notice and go and speak to our engineering and works section. They're the ones that deal with a lot of the flood studies. We haven't started our flood study for the Minnamurra River yet but there

may be some – I know that there is one associated with all the information that was provided through the development but - - -

5 MS LEESON: If you could take that on notice, then, Byron, that would be appreciated, thank you.

MR ROBINSON: Yes.

10 MS RICE: What there has been in that area, though, is that there's been consistent road damage in front of the Dunmore House area because, due to heavy rains, there's been buckling of the bitumen that's occurred in there, too, and when you drive that road now you can see the repairs that are done in the vicinity of Dunmore House and I presume that that problem has been created by water flow across the river and under the road, would be my guess, so, to me, it appears like it probably is marginal
15 now but I don't know the whole engineering things. I just know it from a motorist point of view that there's damage and at one point the road buckled so much that it was particularly dangerous.

20 MS LEESON: Yes. I mean, I think the Department has recommended conditions around dilapidation surveys of the road before they would spill out to start any work and then post-completion dilapidation surveys and necessary rectifications. It's from an operational perspective, rather than the damage perspective, and I'm curious as to whether that road is ever closed at the moment because of flooding.

25 MR RIPPON: I think there's been some closed at times but it depends on the – because I know that part of the road is within Kiama Council area and there's part that are maybe within the Shellharbour area, so that's why you're not getting necessarily straight answers from us but what we'll do is we'll speak to the engineering department and also to our LENC and get you some very clear flooding
30 information around that road and impact on operations, as in, how many times it's closed, what impacts have there been over the information that we have, so we'll get that back to you.

35 MS LEESON: Yes. My key interest is whether an additional 16 millimetres is going to cause road closures under certain circumstances and if you could do that that would be appreciated, thanks, Jessica. Peter, I don't think I have any further questions for council around their submission. Is there anything that you'd like to follow up?

40 MR COCHRANE: No. No, that's been – had a very thorough from council, so I think that's covered the issues.

45 MS LEESON: And it is a very clear submission or submissions that council has made in relation to this, so – is there anything else council would like to raise with us that you haven't had the opportunity yet?

MR RIPPON: No, I think we've covered off the key issues. I guess, we've certainly always maintained around the assessment process and the whole piece around the modification and using the current legislation, rather than obviously what it's currently being assessed under, and, you know, we accept that the Department's making but, certainly, if you did assess it under the existing and current
5 legislations, it certainly paints a very different picture to how it's being assessed now, so I guess having some sort of in relation to that – I just wanted to highlight our concerns in that space, as well. That's probably the only feedback that we haven't covered, thank you.

10 MS LEESON: Thank you. And we will be turning our minds to the planning pathway for the proposal, as well, so that's something we do need to take into account. Well, if there's nothing else or if I can ask Brad or Alison: are there any issues from the Commission's perspective that you think we've not addressed that
15 you'd like to draw to our attention?

MR JAMES: No questions from me, Di.

20 MS LEESON: Okay. Thanks, Brad.

MS HILL: No questions from me, either, thank you.

MS LEESON: Terrific. Thank you, Alison. Then, that being the case, I'd very much like to thank you for the time that you've given us today. As you mentioned,
25 Kathy, there will be a public meeting on 28 October. Submission or registration for that is open at the moment and if council would like to make further representations, then, you can go down that path of registration. I think we've heard quite clearly from you today what the concerns are and they very much reinforce what's been in your various submissions, so with that I would like to thank you very much and we
30 will close the meeting. Thank you.

MS RICE: Thank you very much.

35 MS LEESON: Bye bye.

MS RICE: Bye.

MS LEESON: Bye.

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MATTER ADJOURNED at 10.50 am INDEFINITELY