

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of an application by Kaipara Ltd for coastal permits to extract sand from the coastal marine area offshore at Pakiri (CST60343373)

**SUBMISSIONS OF FRIENDS OF PAKIRI BEACH ON THE JOINT WITNESS STATEMENT OF
THE COASTAL PROCESSES EXPERT CAUCUSING GROUP & THE SUPPLEMENTARY
EVIDENCE OF THOSE EXPERTS**

9 February 2022

1. INTRODUCTION

1.1 This memorandum is filed in response to the directions from the Hearing Panel dated 8 January 2021 and addresses the Expert Group caucusing outcomes, the JWS and the individual supplementary evidence of members of the caucus group lodged to date.

2. SUMMARY OF FOPB STANCE PRIOR TO EXPERT GROUP CAUCUSING AND JWS

2.1 In summary, FOPB's position in opposition to the application for resource consent, prior to the expert group caucusing and JWS was as follows:

- a) A precautionary approach is required, in particular due to the gross deficiency in baseline information, in part caused by the applicant's failure to adhere to consent conditions requiring ;
- b) The Commissioners are entitled to draw adverse inferences from the past conduct of the consent holder, including numerous proven and admitted breaches of the consent conditions both on and off the water;
- c) Cumulative effects of the proposed activity, including related effects of the pending nearshore applications, have not been properly considered or addressed;
- d) The only option is to decline the consent.

3. SUBMISSIONS ON THE JWS

3.1 The new survey work vindicates everything that FOPB and Mr Damon Clapshaw and their experts have said about what has actually occurred on the seabed, compared to what the applicant (Kaipara originally) and the Council understood.

- a) See JWS at [20] "dredged trench features over the same area of 0.1m to 1.7m in depth", which confirms the breach of the Consent Condition 3 "to endeavour to limit those extractions to no deeper than the thickness of the active sand layer". Recall that the evidence of Dr Mead and Dr Single, experts in this area, advised that at the depths applying to where the dredging is being carried out, the active sand layer is "a few tens of centimetres."

- b) See JWS at [21] despite some infill “however distinct dredged features as described in Paragraph 20 remain evident.”

3.2 The survey work demonstrates that there are clearly significant trenches established well beyond the active sand layer which have been dug by the repeat dredging, in the same areas, which are traps and which despite storms and no dredging in more recent times, are still there. Clearly it has now been proven that there are adverse effects on the movement of sand.

3.3 The important Mangawhai-Pakiri embayment has now proven to be ploughed up in a devastating fashion. The natural character of the coastal environment which includes the seabed, and the seabed’s benthic qualities, and its cultural importance to Maori, have all been hugely disturbed.

3.4 This is a devastating situation that no doubt the Commissioners are shocked by.

3.5 It is worth repeating that if the applicant had complied with Consent Conditions 11 to 13, all this information would have been known years ago. The EMMP for Area 1 says that when monitoring is done it shall include state of the art hydrographic surveys and simultaneous side scan sonar imagery of the sea floor. When Kaipara/McCallums did do any of this monitoring, it completely failed to do the imagery of the sea floor – essential to pick up its trenches and the ploughed paddock it was creating. The information would also have been known had Kaipara/McCallums disclosed the presence of the trenches when they discovered them themselves, as disclosed in evidence during the hearing. Instead, they concealed their existence.

3.6 Paragraphs 23 and 24 of the JWS, are directly referable to the precautionary principle and argue in favour of the decline of the consent because the Commissioners do not have sufficient answers on these important points to be in any position to grant consent

- a) *23. The available information is inconclusive as to the source of and mechanism for infilling, sediment transport processes across the surveyed area, and any long term effects of the trenches on those coastal processes.*
- b) *24. The available information indicates that sediment is moving in the surveyed offshore area, but it is not possible to draw any conclusions about*

diabathic or longshore transport. The volume, rate and direction of sediment transport are not able to be inferred from the data available at this time.

4. PARAGRAPH 29 OF THE JWS

4.1 Paragraph 29 of the JWS, under the heading “Issues Outstanding” states:

29. The CPECG considers that a coordinated and sustained monitoring programme needs to be developed, approved and implemented for any sand extraction activities in the Mangawhai – Pakiri embayment, and linked to an adaptive management plan for those sand extraction activities. Such a monitoring programme might include, for example:

(a) A hydrographic survey of the Mangawhai – Pakiri embayment comparable to the October 2021 survey to be undertaken for the area of dredged trench features defined by the October 2021 profiles A1 to C3 (inclusive, as shown in Figure 8 of **Attachment 5**) and the Proposed Northern and Southern Control Areas (as shown in Enclosure 1 in **Attachment 1**), capturing sufficient data to monitor bedforms, and dredged trench features in key areas; such survey to be undertaken in October 2022 and two-yearly thereafter.

(b) Each cycle of survey results to be analysed by a coastal processes specialist to inform an adaptive management plan for all sand extraction activities in the embayment.

4.2 Thus the experts in the Expert Group are saying that as a result of the new survey work, that the large scale programme described there must developed, approved and implemented *for any sand extraction in the embayment.*

4.3 But no such programme was developed and implemented, and the results obtained before this application was lodged. Nor was any such programme even developed as a proposed monitoring programme that formed part of the application, which was then able to be the subject of submissions and evidence before the Commissioners, so that it could be assessed and tested through the hearing process.

- 4.4** What's more, paragraph 29 of the JWS then contemplates some form of adaptive management as well, as part of the implementation of the not yet developed extensive monitoring programme. But, just like the programme itself, that proposed adaptive management regime has also never been developed, nor put in evidence, nor assessed, nor been able to be subject to the hearing process in this case.
- 4.5** So the very thing all the experts agree on for any extraction activities is not any part of this case. FOPB say that it is certainly not something the applicant can just tack on somehow in its reply evidence – which is *reply*, not starting again. Nor is it any opportunity to propose significant new work be undertaken untested during the hearing and as a condition of consent, especially where the results would be crucial to the Commissioners' decision whether to grant or decline consent. Nor, for the same reasons, is it something that the Council officers can purport to put up in their response to evidence that has preceded them.
- 4.6** In addition, 29(b) suggests that the required monitoring programme might require an adaptive management plan. As noted in our memorandum seeking leave to file these submissions, the Friends are strongly opposed to any proposal for adaptive management procedures in this particular case given the applicant's established record of non-compliance with existing consent conditions. The applicant's prior misconduct means adaptive management would be entirely inappropriate.
- 4.7** In any event, for the Commissioners even to consider an adaptive management plan, would require an extensive proposal for adaptive management regime that could be subject to consideration and comment on by all parties during the consent hearing. No detailed adaptive management regime associated with any comprehensive monitoring programme, as discussed in para 29, has ever been part of the applicant's case nor been subject to the submission process, nor been part of the evidence during the hearing. And it is too late – and contrary to natural justice – for it to be shoe-horned into any reply.
- 4.8** These considerations alone demand that the application be declined.

5. SUBMISSIONS ON THE RELATED EXPERT STATEMENTS

5.1 Dr Shaw Mead was a member of the Expert Group and has filed a supplementary statement addressing the further directed scan and the expert caucusing process and resulting JSW.¹

5.2 In summary, Dr Mead confirms:

a) Consent condition breaches on the seabed (dredging below the active sand layer and no tier 2 investigation).

b) His previously expressed concerns about dredging in the Pakiri-Mangawhai embayment and its adverse environmental impacts have only increased

(See eg Mead 28 January 2022 statement at [4.3]: "... the impacts caused by the dredging that have been revealed by the DML seabed imagery are far more extensive and persistent than anyone envisaged.");

c) Many of the assumptions made by the applicant and the Council's experts have been proven incorrect

(See eg Mead 28 January 2022 statement at [3.4] "Assumptions that the current application is based upon, such as mobile sediment relatively quickly infilling the shallow skims created while dredging and recovery of the benthic community within 6 months to several years, are no longer likely to be valid...", at [4.6] "As a result of these findings, some of the assumptions that the current application is based upon, such as mobile sediment relatively quickly infilling the shallow skims created while dredging, are incorrect.");

d) The survey has confirmed the presence of deep shore-parallel trenches caused by the applicants repeatedly dredging the same run-line, and confirmed the widespread and persistent impacts of dredging the offshore areas of the Mangawhai-Pakiri Embayment.

¹ In its memorandum of 3 February 2022, the applicant has indicated that Dr Mead's further evidence "goes well beyond the scope of the Commissioner's directions" It will, therefore, be the subject of an objection by MBL." FOPB refutes this allegation and notes that one only has to read the headings of Dr Mead's statement to see that it complies with the 17 December 2021 Direction. However, at the time of filing these submissions, no formal objection has been received. FOPB therefore reserves its right to respond to any formal objection that is made.

- e) The evidence of extensive dredged tracks confirms his concerns regarding diabathic sediment transport (especially the deep and persistently dredged trenches), that they represent sediment traps reducing diabathic sediment transport. In other words, creating deep shore-parallel trenches prevents cross-shelf transport into the beach compartment

(See Mead 28 January 2022 statement at section 5 “Impacts on Coastal Process”).

- f) Contrary to applicant assertions, the dredge head does not need to be lifted to turn the dredge vessel (Mead 28 January 2022 statement at [4.15]). This is made abundantly clear in his Figure 4, pg 19 of his January statement. This confirms FOPB and Mr Clapshaw’s contentions regarding on the water consent condition breaches (dredging outside northern boundary and shoreward of 2km).
- g) Proposed consent conditions for the current application do not address the issues identified with respect to consent breaches and dredging practices and seem to be less robust than the previous conditions. A major question as to whether there is an adequate foundation and assessment of effects to grant a new consent for the offshore area, particularly given inadequate control sites that are within the impact area.

5.3 Based on Dr Mead’s assessment, the Commissioners can have very little confidence that granting a further consent is appropriate.

5.4 Another member of the expert group, Professor Hilton, has referred to the seabed as a ploughed paddock of hundreds of hectares and stated that the data produced in the recent survey “provide a very worrying picture of the extent and density of trenches and marks on the surface character of the Pakiri seabed. ... This intensity of extraction, over a large area, must raise questions as to the extent to which the activity is consistent with the imperative to preserve the natural character of the coastal environment” (Hilton statement at [3.3]).

5.5 Professor Hilton also noted, in respect of sediment transport and trench infill, that: “One would expect trenches to be erased, or made less conspicuous, over relatively short

periods (months to years) if sediment transport across these surfaces occurred frequently or at a significant rate” (Hilton at [3.4]). Yet this has not occurred.

5.6 Again, directly referable to the precautionary principle, Professor Hilton states at [3.7]: “The presence of these features [ie bedforms] points to how little we know about the Pakiri-Mangawhai Sand System, and how much should be established before further consents to mine sand are granted.”

5.7 He then states that the extent and orientation of the large scale bedform features:

... are inconsistent with arguments for significant diabathic (onshore) sand transport into the mining area to replace sand extracted. If significant sand transport within the sand system occurs it appears it may be primarily from north to south, although over what time scale and at what rate remains to be investigated and confirmed.

5.8 In addition, the evidence of Sian John for Te Whanau O Pakiri states that her concern over the impacts of climate change have only increased following the further survey and expert caucusing. FOPB agree with her conclusion that “it is essential that a full understanding of the sediment transport processes associated with the Mangawhai – Pakiri seabed and the dredged features is obtained before any further extraction is consented.” We would only add that a complete halt to all sand mining activity must occur for that process to be meaningful.

5.9 Overall, the conclusions of the above experts paint a concerning picture of the effects of sandmining and argue against the grant of consent.

6. CONCLUSION

6.1 The further survey results, the Expert Group caucusing outcomes, the JWS and the individual supplementary evidence of members of the caucus group, have all vindicated FOPB and other opposition submitters evidence about the applicant’s dredging practices. And it has entirely vindicated their opposition to the consent being granted.

6.2 Given the findings of the survey and earlier ones by FOPB/Damon Clapshaw, and the experts themselves saying everything in paragraph 29 of the JWS must be done before

any extraction activities, when no such programme or regime is before the Commissioners, the precautionary principle in the NZCPS dictates that consent should be declined.

Nick Williams

Barrister

A handwritten signature in blue ink, appearing to read 'N Williams', with a horizontal line underneath.

On Behalf Of:

Friends of Pakiri Beach

9 February 2022