

**BEFORE COMMISSIONERS APPOINTED BY THE CANTERBURY
REGIONAL COUNCIL**

UNDER the Resource Management Act 1991

IN THE MATTER applications for resource consents by Lyttelton Port
Company for capital and maintenance dredging

**OPENING LEGAL SUBMISSIONS FOR TE HAPŪ O NGĀTI WHEKE,
TE RŪNANGA O KOUKOURĀRATA, NGĀI TAHU SEAFOOD, AND
TE RŪNANGA O NGĀI TAHU**

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NATURAL RESOURCES LAW LIMITED

Solicitor: M R Christensen
(mark@naturalresourceslaw.co.nz)

PO Box 6643
Upper Riccarton
CHRISTCHURCH 8442

Tel 0274 878611

Introduction

1 These submissions are on behalf of Te Hapū o Ngāti Wheke and Te Rūnanga o Koukourārata (ngā Rūnanga), Ngāi Tahu Seafood, Te Rūnanga o Ngāi Tahu (Te Rūnanga), (collectively referred to as Ngāi Tahu). Ngāi Tahu is a submitter on the applications.

2 These submissions summarise the case for Ngāi Tahu, and particularly emphasise two aspects:

(a) Substantial concerns around the modelling and the consequent assessment of effects provided by Lyttelton Port Company (LPC) in the application and its evidence; and

(b) 'Net gain' in mahinga kai and how the Panel should address this issue.

3 Ngāti Wheke and Koukourārata have a responsibility to exercise kaitiakitanga for Whakaraupō/Lyttelton Harbour and Koukourārata/Port Levy. They have witnessed the continuing decline in environmental quality and mahinga kai over many decades. It is now time to stop that decline and to reverse that trend. Reversing the decline is possible and it is practicable.

4 These applications present a unique opportunity. The opportunity presented to LPC and its owner, the Christchurch City Council, is to demonstrate national leadership in responsible environmental port management in a way which contributes towards reversing the long history of degradation of Whakaraupō/Lyttelton Harbour. The opportunity involves integrating engineering and income generation considerations with truly sustainable and intergenerational social, cultural and environmental outcomes, in a way which could distinguish LPC and the City Council from other recent dredging projects in this country. This is not just a matter of concern to Ngāi Tahu. It goes to the core of how corporate environmental management could, and should, be exercised in New Zealand in the future.

5 Regrettably, however, Ngāi Tahu considers that this leadership is not yet being demonstrated, and despite many opportunities through the Manawhenua Advisory Group (MAG) and Technical Advisory Group (TAG), LPC appears only to be recently and reluctantly engaging in a

discussion about positive environmental and social outcomes or 'net gain'. Leadership is required, and Ngāi Tahu is looking to LPC and its owner the Christchurch City Council to provide that leadership, in partnership with Ngāi Tahu, to benefit the entire community.

- 6 The outcome of these current resource consent applications should build on the agreement to establish the non-statutory Catchment Management Plan for Whakaraupō. These applications provide another opportunity to demonstrate innovative and collaborative leadership, building on existing relationships and placing the development of the port within a larger vision for Whakaraupō and Koukourārata.
- 7 Ngāi Tahu acknowledge LPC's willingness to engage with them through consultation. The establishment of the MAG, the TAG, and the development of the non-statutory Catchment Management Plan for Whakaraupō are all positive features of the relationship. These applications provide an opportunity to strengthen the relationship. Ngāi Tahu expect, however, that if consents are to be granted for the dredging, the consent conditions will contribute significantly towards achieving the objectives set out in the Mahaanui Iwi Management Plan and the recommendations of the Cultural Impact Assessment, and deliver gains additional to those expected through the Whakaraupō Catchment Management Plan. In this case, net gain involves LPC supporting manawhenua to exercise kaitiakitanga and rangatiratanga in relation to mahinga kai.
- 8 If the deficiencies in LPC's modelling and effects assessments are corrected so consents can be granted, Ngāi Tahu requests the Panel to impose conditions so that the dredging and disposal as part of the Port's development align with the long term Ngāi Tahu vision to:
 - (a) protect, restore and enhance the mahinga kai values and water quality of Whakaraupō and Koukourārata and coastal waters; and
 - (b) to exercise kaitiakitanga and rangatiratanga.
- 9 Both the development of the Port and net gains in physical and cultural values are possible, and should be the product of this process. To achieve enough certainty for all concerned, the mahinga kai net gain needs to be clearly articulated in conditions attached to the grant of

consents, and not left to further and continuing discussions between LPC and Ngāi Tahu after consents are granted.

- 10 But we are yet some considerable distance from that outcome. Overall, Ngāi Tahu remains sceptical of LPC's conclusion that New Zealand's largest ever dredging project will have no discernible effects on the physical environment other than on the actual dredging and disposal areas. This contrasts with effects which were recognised by all stakeholders for both the Port Tauranga Port and Port of Otago dredging projects.

Hydrodynamic Modelling and the assessment of potential effects

- 11 Ngāi Tahu has provided to LPC detailed comments on what it considers are deficiencies in the modelling used. The advice provided to Ngāi Tahu by Mr Oldman and Dr Pritchard is that the approach to modelling by LPC is not best practice. Best practice modelling is an essential component of designing an optimal monitoring programme and a safe dredge operation plan.
- 12 As set out in Mr Oldman's and Dr Pritchard's evidence, there are fundamental limitations with LPC's modelling approach in the Whakaraupō/Lyttelton harbour. These limitations have implications for the setting of trigger values, the management of the dredging operation, and the wider assessment of effects. It is unclear why a different modelling approach has been used for offshore and in-harbour effects. Moreover, the advisors to Ngāi Tahu remain unconvinced by the reasons advanced by Dr Beamsley as to why wind, waves and combined tidal currents should not be used in the model to underpin the assessment of effects.
- 13 The proposed Environmental Monitoring and Management Plan (EMMP) is based on setting trigger levels which are to be derived from an analysis of the frequency and duration of observed elevated turbidity levels. It seems from data collected by LPC that such events occur relatively frequently. Modelling the behaviour of the dredging plume during such events has, however, not been assessed. Consequently, the impact of the dredging when trigger levels may be exceeded cannot be quantified using the modelling adopted by LPC. This means the operational aspects of LPC's 'adaptive management plan' would need to rely heavily on expert judgement to assess the

potential effects of winds, waves, tides and rainfall on turbidity levels and to ultimately decide if observed elevated turbidity levels may be attributable to the dredging operation. Mr Oldman's evidence is that such an approach is not current best practice.

- 14 LPC's position is that the differences in modelling approaches are of no consequence¹ and this is no more than a 'battle of the models' where two experts prefer different approaches, but at the end of the day either modelling approach is adequate. LPC also says that the monitoring proposed by LPC will ensure that any differences between predicted effects and actual effects will be picked up in advance² and the operation 'adapted' to fully address any such unpredicted effects.
- 15 On the advice of its expert advisors, Ngāi Tahu take a different view and says that the differences in the modelling approaches are critical to an understanding of potential effects and the way the operation should be managed, and if adverse effects do occur (which seems likely from Mr Oldman's 'demonstration model' work), then the monitoring will only tell us after the event. But by then it will be too late, and serious non-reversible effects on the ecology of soft sediments and rocky reefs may have occurred.
- 16 As Mr Oldman will say in evidence³, no model will ever reproduce exactly what happens in nature. The only true test of a model is to compare its predictions to observations. In the absence of a complete calibration of a model, any predictions must be treated with caution and the implications of the model results being wrong understood in terms of the potential impacts of any proposed dredging works.
- 17 LPC asserts that the 'risk' of the modelling being incorrect is on it as operator, rather than on the environment⁴. Ngāi Tahu does not agree. First, it is not clear that the monitoring proposed will identify the actual effects. Using Ms Andersons' analogy, we don't actually know if there are enough 'soldiers guarding the gates'. Those soldiers will defend against some attacks, but not all, and we don't know where the attacks will come from or their intensity. Moreover, if the triggers 'go off', LPC

¹ LPC Opening Legal Submissions para 40

² LPC Opening Submissions paragraph 42

³ Oldman, Evidence summary 5 May 2017

⁴ Eg LPC Opening Submissions paragraph 41

says they will 'learn as they go', but we do not know the benefits (if any) of such learnings, or how they might be applied to avoid, remedy or mitigate adverse effects.

18 Current best practice guidelines indicate that approximately 5% of the overall dredge volume may be spilt during a dredging campaign. The management of the potential impact of the spill material is a crucial part of both the planning and execution phase of any dredging project. Dredge operators internationally spend significant resources, time and money to quantify the potential impacts from dredging works and then plan, design and implement dredging works to minimise potential risks.

19 Over the course of the proposed capital dredging a total of up to 900,000 m³ (5% of the total capital dredging volume proposed), is likely to be spilt from the dredger – most which will occur during overflow events.

20 This spill material represents a significant new source of fine grained material to Whakaraupō. That material is currently 'locked up' in the seabed and would not otherwise be in suspension. I disagree with Ms Appleyard's submission⁵ that *King Salmon* can factually be distinguished on the basis that in that case there was a 'additional' material to be introduced, whereas here the sediment is "naturally occurring". I submit that is a distinction without a difference.

21 The modelling presented in the application indicated that this spill material will only ever be deposited in the dredge corridor. However, there is no assessment of the ultimate fate of this spill material: does it stay on the seabed (as the LPC modelling suggests)?; does subsequent capital and/or maintenance dredging re-suspend it (and to what extent)?; do larger vessels coming into and out of the harbour stir it up (providing an opportunity for movement away from the channel)?; and does the ongoing build-up of material near the seabed have any effect on the assessment of effects?

22 The conclusion, based on the LPC modelling, is that will be no impact from the dredging operation at any time, under any conditions in any parts of the harbour.

⁵ LPC Opening Submissions paragraph 30.1

- 23 As Mr Oldman sets out in his evidence, he considers this is highly unlikely to be the case if the combined effects of important processes were properly to be considered, and the uncertainties relating to simulating the fate of recently deposited fine-grained sediment spill material are allowed for.
- 24 In his evidence Mr Oldman presented a 'demonstration model'. He acknowledges that it is uncalibrated, and he has made assumptions about model parameters and in particular the dredge source terms. That 'demonstration model' was never intended to be used as tool to provide an alternative assessment of effects. Rather, it was provided to demonstrate that if a three-dimensional model is used which considers the combined effects of tides, winds and resuspension, then a realistic outcome is that some spill material may be transported away from where the dredge material is placed. This outcome is clearly indicated in the application regarding the offshore disposal area which used a three-dimensional model that includes the effects of waves, tides, oceanic currents and resuspension.
- 25 The purpose of the demonstration model is only to show that a difference in effects from that predicted in the LPC modelling (no effects) can realistically be expected (that is, 'some effects'). However, what 'some effects' is likely to mean can only be quantified using fully coupled models that have been calibrated.
- 26 Given the fundamental inadequacies of the modelling used by LPC and the level of uncertainty about effects that remains, I submit that it is not possible to remedy those deficiencies by continuing with and amending the existing modelling approach and relying on monitoring to detect any problems. Rather, best practice requires a revised modelling approach to be used which focuses more on predicting potential effects and moving away from the 'no effects' at any time, which is the current approach. That revised modelling need only take some months to be completed. It is then required to inform a revised effects assessment.
- 27 For the recent Tauranga Capital Dredge works, significant modelling was carried prior to the consent hearing in parallel with the collection of turbidity modelling data. Models were calibrated against data collected specifically for the Project and included model testing against

observations taken during maintenance dredging. Winds were considered.

28 A combination of analysis of turbidity data and outputs from model simulations were used to derive appropriate management triggers based on predicted potential impacts at sensitive receptor sites.

29 Using modelling tools during the planning and execution phase of the Project significantly contributed to the overall success of the Project by providing the dredge operator with an understanding of the potential benefits of implementing a range of mitigation options.

30 None of that would appear to have been considered here. If it is good enough for Tauranga, then why not for Whakaraupō?

31 So why is Ngāi Tahu so insistent on this? Because, in the end, better information will result in a) the opportunity for better management, and b) better understanding of the magnitude of effects, so we know the magnitude of the net gains we want to achieve.

32 Speculating as to how this situation may have come about, what appears to have happened is that LPC began with a specific model for the harbour, but later on receiving comments from the TAG revised that model to include the seiche, then resuspension, then residuals (offshore). Calibration was carried out in the harbour (at Godley Head), but models used to make the assessment in the application were for offshore. However, the harbour modelling was never adjusted in the same way.

33 Because of these deficiencies, I submit the Panel has three options:

- (a) Decline the applications entirely;
- (b) Adjourn the hearing until LPC has undertaken adequate baseline monitoring and a revised modelling exercise, including if necessary, a revised effects assessment; or
- (c) Grant the consents, but require the remodelling and adequate monitoring to be undertaken and reported on to ECan prior to any dredging starting.

34 Ngāi Tahu considers that the second option is the most appropriate, given the serious consequences if the effects are shown to be

understated, and considering the inability to determine those effects through monitoring until it is essentially too late.

- 35 Adjourning the hearing in this way will also enable LPC to undertake trial dredging (see below) to calibrate the model and to apply an effective adaptive management process. Given that LPC accepts that baseline monitoring should occur for at least 12 months before dredging can start, I submit that any such minor delay in granting consents which achieves a better outcome is acceptable and appropriate.
- 36 To rectify this situation and provide a more robust basis for an assessment of effects, what is required is:
 - (a) Provide a commentary on how monitoring data being collected could assist with the model calibration process and if further data needs to be collected as part of the initial phase of the EMMP;
 - (b) Revisit the calibration process to provide consistency between the models used offshore and within the harbour and if new data is to be used;
 - (c) Provide information on the likely level of deposition within the dredge corridor from the dredge operation including how the ongoing, cumulative effect of the input of spill material is to be managed over the duration of the dredging;
 - (d) Re-run the harbour model by including in combination the effects of winds and resuspension, especially in the area in and around Cashin Quay;
 - (e) Provide an adequate assessment of the potential effects of waves on the dynamics of the spill material along the outer dredge corridor;
 - (f) While this is happening undertake some trial dredging (of which more below) to calibrate/iterate the model;
 - (g) When the model outputs are revised, provide a commentary of the adequacies or otherwise of the existing monitoring programme;

- (h) When the model outputs are revised, re-consider the effects assessments on sensitive receiving environments (soft sediments and rocky reefs);
 - (i) Review and set the appropriate trigger levels. This should include a clear method document which describes how measured data and model outputs will be integrated. This will be possible because the model will predict more than just 'no impact' anywhere in the harbour under all conditions. It should complement and strengthen the statistical approach;
 - (j) If necessary, adjust the dredging operation and EMMP adaptive management process based on revised model predictions;
 - (k) Finalise (by agreement if possible) the net gain outcomes to be achieved.
- 37 In October 2016, LPC suggested to Ngāti Wheke that some trial dredging with the existing maintenance dredge would "complement our understanding of the coastal environment".⁶ This would be a true expression of adaptive management, and remains relevant and useful. Such a trial would significantly assist with the refinement of the remodelling.
- 38 LPC will no doubt say that any delay associated with such a process is financially unacceptable. The cost of remodelling in the overall context of the project is not significant. There is no evidence before you that it is critical to the commercial success of the capital dredging that it occur immediately. Indeed, LPC proposes to undertake the dredging in two stages because there is no commercial imperative to complete it as soon as possible. Moreover, LPC have agreed to 12 months of baseline monitoring before dredging can begin. While LPC has had the opportunity for some time to re-model based on the concerns expressed by Ngāi Tahu, to do so now would only mean a 'delay' of a few months. On the other hand, the failure to get this right might mean substantial and irremediable adverse effects. A precautionary approach as required by the New Zealand Coastal Policy Statement 2010 (NZ Coastal Policy Statement) demands in this situation that we 'make haste slowly'.

⁶ Appendix 2 of the evidence of Henry Couch dated 27 April 2017

- 39 There are other examples of major projects where hearings have been adjourned for significant periods until adequate information has been provided.⁷
- 40 Considering all this, Ngāi Tahu requests the Panel issue an interim decision requiring the matters set out in para 29 to be completed, following which the hearing can be reconvened and a final decision made.

‘Net gain’ of mahinga kai – the legal basis

- 41 The Panel has asked if there is a resource management relevant provision, or legal precedent, that empowers the Panel to decline the LPC applications because it is not “conclusively demonstrated that a net gain in mahinga kai values can be assured” as submitted by Ngāi Tahu.⁸ This section of my submissions addresses the legal basis for that submission. The following sections set out the evidential basis for it.
- 42 I agree with Ms Appleyard’s conclusion⁹ that “there is no direction in any of the statutory instruments discussed above that a net gain in mahinga kai must be demonstrated”. However, it has never been the Ngāi Tahu position that the relevant planning provisions positively mandate such an outcome.
- 43 There are two interrelated sets of effects relating to mahinga kai; physical ecological effects and cultural effects. The evidence of the

⁷ *Final Report and Decision of the Board of Inquiry into the Hauāuru mā Raki Wind Farm and Infrastructure Connection to Grid* May 2011. This was a ministerial call-in to a Board of Inquiry. The first hearing started in April 2009. It was adjourned on the direction of the Board in May 2009 with directions requiring actions to be taken (see paragraph [49], with the hearing being reconvened in September 2010. *Crest Energy Kaipara Ltd v Northland Regional Council* [2011] NZEnvC 26 involved an application for coastal permits for the placement of electricity generation turbines on the bed of the Kaipara Harbour. The first hearing was in 2009 with an interim decision being released in December 2009, requiring significant modifications to be made to the Environmental Monitoring Plan and conditions of consent. Extensive additional evidence was provided, and the Environment Court made its final decision in February 2011. *Mainpower NZ Ltd v Hurunui District Council* [2011] NZEnvC 384 was an application for consents for the Mt Cass wind farm. After the appeal was set down for hearing, mediation between the parties resulted in a revised layout for the wind farm and necessitated additional consent applications. The Court granted an adjournment of the hearing ([2010 NZEnvC 41]) for a period of 4 months to allow the new applications to ‘catch up’ with the original applications.

⁸ 4th Minute of the Commissioners dated 21 April 2017

⁹ LPC Opening submissions paragraph 61

representatives of Ngāi Tahu¹⁰ attempts to demonstrate the interconnection between these two sets of effects. A cultural effect can occur even in the absence of physical impacts.¹¹

44 In summary, I submit the answer to the Panel's question goes to the Panel's overall discretion under s104(1) of the RMA.

(a) **Cultural effects**

45 First, in terms of cultural effects, it goes to how you decide, in your discretion, how to apply the relevant planning provisions and what is required to "recognise and provide for" "the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga"¹², having particular regard to kaitiakitanga¹³; and taking into account the principles of Tiriti o Waitangi, (the Treaty of Waitangi).¹⁴ Second, in terms of addressing physical effects on biodiversity, while the Panel cannot impose a requirement to achieve a 'biodiversity offset', you can, and should, take into account whether or not LPC offers some form of physical 'offset' or 'environmental compensation' to address such effects (recognising, however, that there remains real uncertainty about what those physical effects are in this case).

46 I agree with Ms Appleyard¹⁵, that the High Court has confirmed in *Davidson Family Trust v Marlborough District Council*¹⁶ that the reasoning in *King Salmon* applies to s 104(1) of the RMA. In that case, the Trust applied to the Marlborough District Council for resource consent to establish a mussel farm in Pelorus Sound. The application was declined at first instance by an Independent Commissioner on behalf of the Council, and then by the Environment Court. The Trust appealed to the High Court alleging errors of law in the Environment Court's decision. The key issue raised on appeal was whether the Environment Court erred by considering the planning

¹⁰ Evidence of Donald Couch, Henry Couch, Matea Gillies and Tasman Gillies

¹¹ Te Runanga o Ngai Te Rangī Iwi Trust v *Bay of Plenty Regional Council* [2011] NZEnvC 402 at [299] to [305]

¹² Section 6(e) RMA

¹³ Section 7(a) RMA

¹⁴ Section 8 RMA

¹⁵ LPC Opening submissions paragraph 56

¹⁶ *Davidson Family Trust v Marlborough District Council* [2017] NZHC 52

instruments to the exclusion of Part 2 of the RMA in reaching its determination.

47 The High Court found that the Supreme Court's reasoning in *King Salmon* did apply. The High Court noted that in *King Salmon* the Supreme Court found that because the NZ Coastal Policy Statement was intended to give substance to the provisions of Part 2 of the RMA, there was no need to refer to Part 2 when considering the Plan change (unless the relevant statutory document was found to be invalid, incomplete or uncertain).¹⁷

48 The High Court noted that the Supreme Court in *King Salmon* emphasised that:¹⁸

The RMA envisages the formulation and promulgation of a cascade of planning documents, each intended, ultimately, to give effect to s 5, and to Part 2 more generally. These documents form an integral part of the legislative framework of the RMA and give substance to its purpose by identifying objectives, policies, methods and rules with increasing particularity both as to substantive content and locality.

49 The High Court found that this reasoning applied to the assessment of resource consent applications under s 104(1) "because the relevant provisions of the planning documents, which include the NZ Coastal Policy Statement, have already given substance to the principles in Part 2".¹⁹ Accordingly, "it would be inconsistent with the scheme of the RMA and *King Salmon* to allow Regional or District Plans to be rendered ineffective by general recourse to Part 2 in deciding resource consent applications."²⁰ The High Court also agreed with the Supreme Court's caveats that where there has been invalidity, incomplete coverage or uncertainty of meaning within the planning documents, resort to Part 2 should then occur.

50 I also agree with Ms Appleyard²¹ that Objective 7.1, Policy 10.1.5, Policy 10.1.9 and Rules 10.12 and 10.18 of the Regional Coastal Environment Plan are the relevant provisions from that Plan.

¹⁷ Paragraph 69 of the *Davidson* decision

¹⁸ Paragraph 71 of the decision

¹⁹ Paragraph 76 of the decision

²⁰ Paragraph 77 of the decision

²¹ LPC Opening submissions paragraph 59

51 However, the NZ Coastal Policy Statement 2010 is also directly relevant and necessary to have regard to.²² Ms Lynch discusses the relevant provisions in her evidence.²³ Policies 2 (“The Treaty of Waitangi, Tangata Whenua and Māori Heritage”) and 11 (“Indigenous biodiversity (biodiversity)”) are particularly relevant. I discuss them below.

52 I disagree with Ms Appleyard’s conclusion that there is no “invalidity, incomplete coverage, or uncertainty in the planning documents which would enable the Commissioners to have recourse to Part 2 of the RMA”.²⁴ The provisions are incomplete in the sense that the NZ Coastal Policy Statement and the Regional Coastal Environment Plan, while providing considerable direction, do not mandate the outcome with respect to mahinga kai. Under the Regional Plan the applications are discretionary. The plan provides strong guidance (particularly Policy 10.1.4 which I discuss below), but not complete prescription as to how Part 2 is to be applied in this or any other situation. The NZ Coastal Policy Statement also provides direction, but leaves discretion to the decision maker as to specific application. To say the instruments are incomplete is not a criticism of them, nor does it imply they could or should be more prescriptive. It is merely a recognition that the instruments seek to do no more than provide parameters and guidance for the exercise of discretionary decision making.

53 That can be distinguished from the situation in *King Salmon*. There the relevant policy in the NZ Coastal Policy Statement was to ‘avoid’ adverse effects of activities on natural character in areas of outstanding natural character (policies 13 and 15). The area in question was found to be such a landscape. The Supreme Court held that ‘avoid’ in that context meant what it said, and there was no need to then also consider Part 2 more generally, particularly in a way which might undermine the clear policy direction in the NZ Coastal Policy Statement.

54 So, the Ngāi Tahu submission that the Panel should decline the applications unless it is conclusively demonstrated that a net gain in

²² Section 104(1)(b)(iv) RMA

²³ Philippa Lynch Evidence dated 4 April 2017 paragraphs 86 - 97

²⁴ LPC Opening Submissions paragraph 61

mahinga kai values can be assured, requests the Panel to exercise its discretion in that manner:

- (a) based on the evidence provided to you;
- (b) considering the relevant provisions in the NZ Coastal Policy Statement and the Regional Coastal Environment Plan;
- (c) and considering sections 6, 7 and 8 of the RMA:

unless you impose conditions which ensure an outcome which is better than allowing continued physical and cultural deterioration of Whakaraupō/Lyttelton Harbour.

- 55 Moreover, LPC's opening submissions fail to recognise that planning provisions are not necessarily determinative of a decision maker's discretion. Planning provisions are one matter to which regard is to be had²⁵, alongside any actual and potential effects,²⁶ and "any other matter the consent authority considers relevant and reasonably necessary to determine the application".²⁷ Positive effects/net gain can be considered under both sections 104(1)(a)²⁸ and (c).

(b) *Physical ecological effects*

- 56 The second type of effects are physical ecological effects. Here, I submit that the Panel can also, in your discretion, decline consent if you consider on the evidence that a net gain in relevant ecological values is required to meet the overall test of sustainable management and a condition to that effect is not offered or accepted by LPC.
- 57 There is no requirement in the RMA to provide a positive effect, biodiversity offset or environmental compensation. It is up to the decision maker to decide what may be necessary or appropriate in any situation. Biodiversity offsets/environmental compensation should be distinguished from mitigation. 'Mitigate' means to alleviate, or moderate the severity of something. Offsets do not do that. Offsets are not mitigation of adverse effects, but rather they are to be considered

²⁵ Section 104(1)(b) RMA

²⁶ Section 104(1)(a)

²⁷ Section 104(c)

²⁸ 'Effects include' positive effects, section 3(a) RMA

as positive effects offered by an applicant to offset an adverse effect caused by the proposed activity.²⁹

58 The critical implication of this distinction is that LPC cannot be required to provide offsetting or environmental compensation to achieve an outcome, whereas conditions on mitigation can be required by a decision maker. However, in practical terms this is not an impediment to the full exercise of the Panel's discretion. I submit that you can decline an application if you consider that sustainable management can only be achieved if some form of offset or environmental compensation is necessary, and LPC does not offer it or accept such a condition. LPC say they are prepared to commit to a 'net gain' outcome. However, until we are clear what that will mean in practical terms, and a condition agreed which makes that clear and enforceable, the issue remains unresolved.

59 Again, I submit that the adequacy of what is offered is part of the broad discretionary judgment. This broad approach where offers (or at least acceptance) of biodiversity offsets/compensation were considered and were decisive in the outcome, has been adopted in a number of Environment Court and Board of Inquiry decisions.³⁰ While not stated explicitly, it is implicit that if these conditions were not offered or accepted, then the applications would likely have been declined.

60 The difficulty here, is that there is a considerable level of uncertainty about just what the physical ecological effects will be.

Cultural effects and mahinga kai

61 This section of my submissions addresses the evidential basis in relation to cultural effects for the submission that consent should only be granted if a net gain can be assured.

²⁹ *Royal Forest and Bird Protection Society of New Zealand v Buller District Council and West Coast Regional Council and others* [2013] NZHC 1346, Fogarty J. at [72]

³⁰ Eg, *MainPower NZ Ltd v Hurunui District Council* [2011] NZEnvC 384 (the Mt Cass wind farm); *Final Report and Decision of the Board of Inquiry*, 12 June 2012, available at <http://www.epa.govt.nz/Publications> Transmission Gully motorway project; *West Coast Environmental Network Inc v West Coast Regional Council and Buller District Council* [2013] NZEnvC 47 and *West Coast Environmental Network Inc v West Coast Regional Council and Buller District Council* [2013] NZEnvC 178 (Escarpment coal mine on the Denniston plateau)..

- 62 The cultural, spiritual, historic, and traditional association with Whakaraupō/Lyttelton Harbour and Koukourārata and the coastal area offshore from both harbours has been recognised in statute and is articulated in the evidence of the Ngāi Tahu representatives.
- 63 The Ngāi Tahu cultural evidence includes details on the effects of water quality on mahinga kai in their mana moana. The 2016 Cultural Impact Assessment Update also advises that some activities can have a cultural effect without a detectable physical impact. For example, even if there are no detectable effects on water quality beyond the footprint of the dredging activity in Whakaraupō, there may be an effect on how manawhenua experience and engage with the harbour as a result of continuous dredging³¹.
- 64 Mr Tasman Gillies describes a permanent scar that the proposed activities will leave in the harbour, no matter what physical mitigation is carried out.
- 65 Mr H Couch's evidence is that manawhenua consider LPCs proposal to move the maintenance disposal site offshore simply lessens an on-going negative effect from decades of negative effects that tangata tiaki never considered appropriate.
- 66 The overall outcomes expected by Ngāi Tahu are set out in the Cultural Impact Assessment (CIA):
1. Increased confidence and certainty around the nature and extent of potential effects, and the ability of the EMMP to manage these.
 2. Ongoing relationship with LPC, as a port company with long term interest in Whakaraupō and responsibilities to protect the harbour environment.
 3. Continued ability to safely access and gather food in the coastal environment.
 4. Continued ability to exercise kaitiakitanga over the coastal environment of their respective takiwā.
 5. Continual improvement to the health of the Whakaraupō and Koukourārata, including the enhancement of mahinga kai sites, species and habitats, consistent with the 'net gain' approach.

³¹ CIA Update 2016 page 16

6. The protection of future aspirations of manawhenua, including proposed Mātaitai (Whakaraupō) and intentions to establish further marine farms (Koukourārata).

67 The Environment Court's decision in the Port of Tauranga dredging case³² discusses cultural effects associated with mahinga kai. In many ways, the situation in Tauranga is similar to the situation here (though I note that the LPC/manawhenua relationship is considerably healthier than what appears to have been the case in Tauranga). I set out at some length relevant parts of the Port Tauranga decision because it has so many parallels which may assist the Panel. I submit it is an example of the exercise of discretion which Ngāi Tahu says is appropriate here. That decision granted consent on conditions, including positive actions. I submit that the implication is that the Court considered that the consent should only be granted if those conditions were imposed.

68 The Court's decision begins with the same overall evaluation which the Panel here will be concerned with:

[1] How do we integrate the competing interests of the Port of Tauranga (the Port) seeking to widen and deepen the entrance to its entry channel to accommodate larger ships, while recognising and providing for the legitimate cultural concern and relationship of relevant local iwi...?

[2] In this decision we examine these questions in the context of the Resource Management Act (the Act), and consider a breadth of scientific, cultural and metaphysical concerns. This case highlights many of the tensions inherent in the Act and the need to exercise careful value judgments in order to achieve sustainable management as that term is defined in the Act.

[3] As was noted by the Privy Council in *McGuire v Hastings District Council*:³³

21. ... The Act has a single broad purpose. Nonetheless, in achieving it, all the authorities concerned are bound by certain requirements and

³² *Te Runanga O Ngai Te Rangi Iwi Trust v Bay of Plenty Regional Council* [2011] NZEnvC 402

³³ [2001] NZRMA 557 (PC) at [21]

these include particular sensitivity to Maori issues ... While, as already mentioned, this cannot exclude compulsory acquisition (with proper compensation) for necessary public purposes, it and the other statutory provisions quoted do mean that special regard to Maori interests and values is required in such policy decisions...

- 69 Cultural effects of the Tauranga dredging proposal are discussed in paragraphs [174] to [242] of the decision. The evidence presented by the iwi there is remarkably like the evidence you will hear from witnesses on behalf of Ngāi Tahu. For example:

[169] However, as acknowledged by the ecologists, the evaluation of the significance of these effects on pipi does not end with the scientific assessment. The impact must also be considered in the context of the cultural importance of Te Paritaha and its value to local iwi. That consideration comes later in this decision.

...

[180] To the tangata whenua, these cultural sites have a mauri (or life essence) binding each member of the tribes through mana (prestige), tapu (sacredness), and whakapapa (genealogy) to these sites and the early ancestors of the canoes who discovered them. It is these links from the past to the present that create the relationship the tribes have with their ancestral lands and waters.

[181] The nature of the relationship the tribes have with Te Awanui was perhaps best captured in the expression provided by Mr Hauata Palmer, *Ko au te Moana, Iw te Moana Iw au, or I am the sea- the sea is me*. He used this saying when he explained that the marine environment has been their source of sustenance, recreation and spiritual wellbeing. In terms of its fisheries the relationship of Maori with their relatives of the sea was captured in a similar way when Hori Tupaea, a chief of Ngai Te Rangi, stated in ancient times, *Ko au te patiki, ko te patiki Iw au or I am the flounder - the flounder is me*.

...

[191] To nurture their relationship with Te Awanui, we were told that over many centuries the tribes developed management practices and customs to preserve the resources of the area. As kaitiaki, they used tikanga and kawa (rules/customary practices and rituals) to moderate

and manage the tapu aspects of the relationship with these sites and waters and the resources to be found there...

...

[193] The ability to protect and manage these ancestral resources as kaitiaki is considered important- because it discharges the tikanga obligation of the appellants to future generations. An example from the evidence of Mr Anthony Fisher relates to the Ngati Te Rangi Resource Management Plan (1995) he developed and its first whakatauki or proverb exalting the people to care for their tribal domain including the feet of Mauao.

[194] Management also ensures other cultural practices and values which underpin the way of life of the appellants can continue. Such practices and values include manaakitanga (ensuring there is kaimoana to feed manuhiri or visitors and whanaunga or extended family not resident in Tauranga). In so providing, the mana and prestige of the Tauranga Moana tribes is upheld. There is major whakama or embarrassment when no kaimoana can be provided in accordance with this custom.

[195] Thus, settlement and fishing and gathering remain tangible expressions of the identity of Tauranga Moana tribes and the relationship they enjoy with the physical and metaphysical aspects of Mauao and Te Awanui and their surrounds.

- 70 The Court heard evidence about the effects of past activities in and around the harbour on cultural values and the cumulative effects of the proposed activities:

[211] We were told by witnesses for the appellants that the significant historical and cultural status of these sites and waters and their relationship with these must, in accordance with their tikanga, be protected.

[212] Whilst acknowledging that the mauri of Te Awanui has been diminished by previous reclamation works, dredging of the harbour, pollution, over-fishing and numerous other impacts that flow from the industrial use, urban sprawl and land use changes around the harbour, they contend their relationship remains as does their mana, rangatiratanga and kaitiakitanga over the sites. As Mr Black put it, they

have a intergenerational responsibility to their ancestors and grandchildren to *preserve in the best state possible an environment that will be a fruitful resource for future generations.*

[213] The appellants believe that the cumulative effects of these previous impacts, which have all occurred following the confiscation of their lands and a number of public works takings, combined with the effects of the proposed dredging, widening and deepening of the shipping channel, will further undermine their relationship, kaitiakitanga, cultural values and traditional and cultural practices associated with Mauao and Te Awanui. Mr Koning counsel for Ngai Te Rangi, submitted that the proposed dredging, when added to previous cumulative effects, represents a tipping point in terms of the Maori relationship with Te Awanui and Mauao. He also contended that previous cumulative effects have already degraded the mauri of Te Awanui and Mauao which has resulted in lasting impacts on the mana of Ngai Te Rangi. The Port's proposal will degrade the mauri of Mauao and Te Awanui even further and adversely affect Ngai Te Rangi. Ms Rolleston for Nga Ruahine, contended that the Port's proposal represents a significant cumulative physical adverse effect on areas of immense spiritual and cultural value, with adverse effects affecting the relationship of Nga Ruahine to Te Awanui and Mauao.

71 These comments are very much like the situation here. However, the cultural evidence for Ngāi Tahu does not talk about a 'tipping point' such that the consents should not be granted at all. Rather, it allows for those cultural effects to be addressed through a 'compromise'³⁴ - adequate recognition of and support for achieving net gain in mahinga kai.

72 At Port Tauranga there is also a mataitai in place. The Court considered that significant:

[231] The mataitai, Mr Koning submitted, has its own legal status as an expression of the Crown's continuing treaty obligations to Tauranga Moana iwi. We agree with this position and we note that section 10 of the Treaty of Waitangi (Fishing Claims) Settlement Act 1992 and the Fisheries (Kaimoana Customary Fishing) Regulations 1998 record that

³⁴ Evidence of T Gilles dated 4 April 2017 paragraph 10

the Crown agreed in 1992 to recognise and provide for customary food gathering and the special relationship between tangata whenua and places of importance for customary food gathering (including Tauranga ika and mahinga mataitai). It was established after the Minister of Fisheries was satisfied, inter alia, that there was a special relationship between tangata whenua and the proposed mataitai reserve. In addition he needed to be satisfied that the mataitai reserve was an identified traditional fishing ground and of a size appropriate to effective management by tangata whenua. The Mauao Mataitai Reserve is managed in practice by tangata kaitiaki, and no person may engage in commercial fishing in the reserve.

[232] We consider that the law on mataitai reserves clearly reflects the interests of the Crown and Maori to provide for customary food gathering and the special relationship between tangata whenua and places of customary food gathering importance such as Te Paritaha o te Awanui, Mauao, and the general area within the shipping channel captured within the boundary of the reserve. Thus we reject Ms Hamm's argument that the reserve is predominantly about addressing the sustainability of the fishing resource in areas of significance to iwi for customary food gathering. Rather, the mataitai reserve was established to recognise and provide for the special relationship tangata whenua have with this area.

[233] We conclude as much because of the emphasis in the legislation on the relationship with such places. Thus, the impact of the proposal to dredge, widen and deepen the channel on the mataitai reserve is directly relevant to our Part 2 analysis, and we consider that there will be significant adverse cultural effects on the exercise of the kaitiakitanga and rangatiratanga of the appellants as a result. These impacts we have provided for in our proposed conditions.

- 73 Rapaki was New Zealand's first mātaítai³⁵. Koukourarata, the second.³⁶ An application was made in 2011 for an additional mataitai to cover almost the entire area of Whakaraupo.³⁷ These mātaítai are formal recognition of the relationship Ngāi Tahu has with both harbours.

³⁵ Evidence of Henry Couch paragraph 26

³⁶ Evidence of Peter Ramsden paragraph 28(c)

³⁷ Evidence of H Couch paragraph 27

74 At paragraphs [292] to [298] of the Tauranga decision, the Court considers the various conditions proposed by the applicant and sought by submitters, including positive actions/compensation. The Court concludes that with these conditions attached to the consents, the application meets the overall sustainable management test in section 5 of the RMA.

75 In my submission, the Tauranga decision is an example of the exercise of the s104(1) discretion. The consideration included positive actions or 'net gain' (though that term was not used). Equally, the Court could have decided in its discretion that the controls and conditions, including positive actions/compensation were not adequate and declined consent. The implication is that the consent would not have been granted unless those conditions were imposed. While stated in the context of the consideration of alternatives, I submit the Court's comment applies more generally:

If a consent cannot be granted without unacceptable impacts then it should be refused rather than suggesting another port is more appropriate.³⁸

The relevant planning provisions

Regional Coastal Environment Plan

76 Policy 10.1.4 of the Regional Coastal Environment Plan is about "Lyttelton Harbour Relationships". This policy recognises that development of the port will result in some effects which cannot be avoided or mitigated. In those circumstances, LPC will undertake those activities while ensuring that "effort is made to achieve a net gain in mahinga kai" (my emphasis). I submit that this policy should be given considerable weight. It has only recently been adopted and as such can be considered to strongly indicate (but not exclusively for the reasons advanced earlier) how the relevant NZCPS provisions should be applied in this instance, as well as, how at least in part, the relevant Part 2 provisions should be applied.

77 The reference in the policy to "effort" being made to achieve a net gain, rather than "net gain being achieved" is not a gloss on the strength of the direction about outcome. Rather, it recognises that

³⁸ *Tauranga*, Paragraph 251

there is no recognised process to determine how 'net gain' is achieved or any standard as to what level or type of net gain is acceptable, and it is in the context of the High Court's direction in the *Escarpment* decision that a decision maker cannot force an applicant to provide positive physical ecological effects.

78 Here, there is ample opportunity not only to make an effort but to achieve actual demonstrable net gains. If this policy is to mean anything, it must mean that real, identifiable outcomes are necessary. The Regional Plan allows for port development but only where the policy on net gain is met (my emphasis). Ngāi Tahu is taking a principled and reasonable approach to net gain. They are not seeking to 'right the wrongs' of past decades, and they accept that the net gain should be generally commensurate with the level of effect of the proposed activities (which they say is significant).

79 I submit that unless there are clear outcomes which produce a real net gain, Policy 10.1.4 will not be met. Because reasonable net gain outcomes are available, not to achieve them would mean insufficient effort is being made. Given the weight to be attached to this policy, I submit that any failure to meet it is sufficient grounds in itself to decline the applications.

NZ Coastal Policy Statement 2010

80 Policy 2 of the NZ Coastal Policy Statement relates to "The Treaty of Waitangi, tangata whenua and Māori heritage". That Policy includes (f) which is "provide for opportunities for tangata whenua to exercise kaitiakitanga over water... and fisheries... through such measures as...(ii) providing appropriate methods for the management, maintenance and protection of the taonga of tangata whenua". In this case, the most appropriate measure is to provide for LPC to support manawhenua to achieve net gains in mahinga kai.

81 Policy 11 of the NZ Coastal Policy Statement about "Indigenous biodiversity (biodiversity)" is also important. Policy 11(b)(iv) is to "avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on" ... "(iv) habitats of indigenous species in the coastal environment that are important for ... cultural purposes". The Ngāi Tahu evidence is that the habitats of both harbours are culturally important. The gazetted mātaītai confirm that. The use of

the work ‘avoid’ in the Policy is strong – the same word that was the subject of the Supreme Court’s consideration in *King Salmon*. If any discernible level of sediment reaches either soft sediment or rocky reefs the effects may well be significant³⁹. Avoid, means what it says. However, there remains considerable uncertainty about whether such effects can be avoided.

- 82 The Environment Court in the *Tauranga* case considered the same provisions of the NZ Coastal Policy Statement and stated:

[257] On balance we have concluded that the 2010 Policy Statement is an attempt to more explicitly state the tensions which are inherent within Part 2 of the Act. They are more generally discussed therein than in the 1994 Policy Statement. In other words, the question of important infrastructure within the coastal environment is always a matter that the Court has had regard to as is evidenced in *New Zealand Rail v Marlborough District Council*⁴⁰, and the 2010 Policy Statement is a more explicit statement of the various issues which need to be integrated in reaching a decision in respect of the coastal environment.

[258] Some of these policies might in the circumstances of a particular case be irreconcilable. It may not be possible, for example, to preserve the natural character of the coastal environment while providing for the future infrastructural requirements of the Port. Nevertheless, in reaching an integrated decision it is the Court’s duty to seek an outcome of sustainable management. Looked at in terms of the modified utilitarianism principles of John Stewart Mill, it would be seeking to maximise the benefits to all sectors of society while minimising the detriments. If viewed in this way, we consider that the New Zealand Coastal Policy Statement accords with the objectives of sustainable management of Part 2 of the Act and fits well the various considerations under Section 6, 7 and 8.

Greater Christchurch Regeneration Act

- 83 There is nothing in anything which Ngāi Tahu seeks which is inconsistent with the Lyttelton Port Recovery Plan. In fact, what Ngāi

³⁹ Evidence of Islay Marsden dated 4 April 2017 paragraph 40; Evidence of Christopher Hepburn dated 4 April 2017 paragraph 16

⁴⁰ [1993] 2 NZLR 641

Tahu seeks best implements that Plan. Moreover, it cannot truly be said this proposal is about earthquake recovery and necessitated emergency legislation.

Part 2

- 84 The NZ Coastal Policy Statement and the Regional Coastal Plan provide substantive guidance about how Part 2 should be applied. In essence, port development is allowed, but not at any cost. I submit that the references in those documents to the importance of cultural values and to net gain of mahinga kai in particular points firmly to that being an indication how, in the end, Part 2 should be applied in this instance.

The conditions on net gain which Ngāi Tahu seeks

- 85 The primary position is that the hearing should be adjourned for other reasons. Discussions between Ngāi Tahu and LPC on net gain have been proceeding, but are not finalised. It is critical, I submit, that a condition on net gain is finalised at the time of any grant of consent, and not left to later discussions. Otherwise, the certainty of outcome is at risk. An adjournment will allow for those discussions to continue with the aim of reaching an agreed outcome.
- 86 The continued insistence by LPC⁴¹ that shifting the maintenance disposal site can be the 'net gain' outcome is problematic to those discussions and threatens to undermine the good will that has been built up over time. Ngāi Tahu considers that the suggestion that this could be the 'net gain' that LPC is prepared to provide risks serious offence. LPC's proposal to move the maintenance disposal site offshore simply lessens an on-going negative effect from decades of negative effects that tangata tiaki never considered appropriate. Manawhenua does not consider this a net gain from the deepening of the shipping channel.⁴²
- 87 This is an additional reason why obtaining certainty of outcome at the grant of any consents. If we leave the outcomes to be determined later, and LPC continues to maintain that the shifting of the disposal

⁴¹ LPC Opening submissions paragraph 69.4

⁴² Evidence of Henry Couch paragraph 49

ground is the sum total of, or included in, the 'net gain', both Ngāi Tahu and the environment will lose out.

- 88 While moving from the existing maintenance disposal site to offshore will reduce existing adverse effects, it is not being done for that purpose. Any shift would be done for financial and operational reasons⁴³, and it just happens that these applications provide a convenient context for that change to occur. Moreover, it is now clear that the consent to dispose of material in that location should never have been granted, for both operational and environmental reasons. To allow LPC to treat the change in location as a 'net gain' would be to allow it to profit from a situation that is currently undesirable and should not have been approved.

Aquaculture

- 89 Ngāi Tahu Seafood seeks additional conditions to those agreed between LPC and other aquaculture interests.⁴⁴ Ms Rickard's evidence supports that by demonstrating that the proposed conditions are difficult to apply and achieve any real certainty of outcome.
- 90 Mr Hildebrand for Ngāi Tahu Seafood also seeks the imposition of a bond in the event of adverse effects that arise and which cannot be the subject of an adaptive management regime. A similar bond was the subject of a condition in the *Tauranga* case⁴⁵, though I note there is no discussion of it in the substantive decision. A copy of that bond condition is attached to these submissions.
- 91 A bond was also proposed by the applicant in the Chatham Rock Phosphate offshore mining case (which was declined by the Environmental Protection Agency's Decision Making Committee in February 2015). A copy of that proposed condition is also attached. Ngāi Tahu Seafood seeks the imposition of a similar bond condition in this instance.

⁴³ Evidence of Daniel Pritchard dated 4 April 2017 paragraph 69

⁴⁴ Evidence of Thomas Hildebrand dated 2 May 2017 paragraph 37

⁴⁵ The final set of conditions are found at *Te Runanga o Ngāi Te Rangi Iwi Trust v Bay of Plenty Regional Council* [2011] NZEnvC 197

Location of the capital dredging disposal site

92 Because of the uncertainties involved, and because a cautious
 approach should be taken, the proposed offshore disposal site will risk
 unacceptable adverse effects to high value areas, and should be
 moved further away from the coast. Moving the disposal site further
 from the harbour will reduce the potential adverse effects, provided
 appropriate conditions are imposed. LPC has not demonstrated that
 moving the disposal site to a new location is unreasonable in terms of
 costs relative to the reduction in potential effects.

93 Mr Purves' evidence⁴⁶ sets out the justification for the selection of
 location. Those reasons make sense, insofar as they go. However,
 there is no analysis of the costs and benefits of moving it further
 offshore.

Godley Head disposal site

94 LPC proposes to maintain the existing Godley Head disposal site as a
 'back up'.⁴⁷ Ngāi Tahu considers this neither necessary or appropriate.
 However, if the Panel were minded to provide for this, LPC indicates
 that it will be used 5% of the time. However, it remains unclear what
 this means. Is LPC intending to surrender that consent, and do they
 propose a condition on this maintenance dredging consent to address
 this?

95 The grant of these consents should be conditional on the surrender of
 the existing Godley Head disposal site consent.

Adaptive management

96 As Ms Appleyard acknowledged orally, what LPC proposes is not in
 the nature of a normal approach to adaptive management⁴⁸. Rather,
 what it relies on is adjusting the activity if adverse effects are shown to
 occur. In paragraphs 31 to 54 of the Opening Submissions, Ms
 Appleyard discusses the application of the *King Salmon* criteria about
 adaptive management. I make the following comments in response.

⁴⁶ Evidence in Chief of Andrew Purves paras 37-38

⁴⁷ LPC Opening Submissions paragraph 11

⁴⁸ See also LPC Opening Submissions paragraph 30.2

- (a) While there has been extensive modelling undertaken⁴⁹, Ngāi Tahu considers that modelling not to be consistent with best practice;
- (b) Consequently, the actual and potential effects remain highly uncertain. Ngāi Tahu does not accept that the modelling can reliably predict effects which are “minor or less than minor”⁵⁰;
- (c) The proposed monitoring system may be “far in excess of anything previously used in similar projects in New Zealand”⁵¹, that says nothing about the merits of the proposal, merely that it is better than similar ones in the past. Moreover, if we monitor the wrong things, we won’t get the right answers;
- (d) The setting of ‘trigger levels’⁵² and how they will work remains unclear. The attribution of events to “natural” versus “dredging” causes also remains unclear. To provide a reasonable level of objectivity about this, multiple lines of ‘evidence’ are needed. Three possible lines of evidence are:
 - (i) Hydrodynamic modelling,
 - (ii) Statistical modelling, and
 - (iii) Expert opinion informed by monitoring data.
- (e) (i) is not an option because of how the LPC model has been developed. It is now clear from Dr Fox’s summary and rebuttal that (ii) will not happen. There seems nothing in the conditions which require Dr Fox (or someone with similar expertise) to develop this. It appears that LPC will rely only on (iii) which undermines the “multiple line of evidence’ approach necessary.
- (f) Ngāi Tahu does not accept that “even if the modelling is incorrect” ... “the actual effects of the CDP would not be significantly different”.⁵³ Mr Oldman’s demonstration model shows they may well be very different.
- (g)

⁴⁹ LPC Submissions paragraph 34.1

⁵⁰ LPC Submissions paragraph 34.3

⁵¹ LPC Opening Submissions paragraph 34.4

⁵² LPC Opening Submissions paragraph 34.5

⁵³ LPC Opening Submissions paragraph 40.3

- (h) Relying on trigger values and monitoring⁵⁴ will not address unexpected effects from the dredging activity in the harbour (as distinct from the effects from disposal outside the harbour). By the time effects are discovered, the dredging will have occurred. The trigger values will not assist to stop the dredging happening.
- (i) Ngāi Tahu accepts that the dredging is an important economic activity, but it should not proceed at any cost. It is not that important. If it cannot be done without a demonstrable net gain in mahinga kai, then it should not be done at all.
- (j) Some uncertainty is inevitable⁵⁵. Not all uncertainty is bad.⁵⁶ However, in this case, the level of information provided in the application is fundamentally deficient (particularly in relation to modelling of the movement of sediment within Whakaraupō). This means there is presently too much uncertainty to grant consent, even if an adaptive management regime is adopted. That is because the modelling forms the foundation of the assessment of effects, has guided the placement of monitoring locations and is (under the current proposal) tied explicitly to the setting of trigger levels. An understanding of the physical environment underpins our understanding of ecological systems. A failure to address these issues limits the ability to make informed decisions about this application and undermines any assessment of effects on which this knowledge is based.
- (k) Ngāi Tahu is not seeking LPC to have undertaken “all necessary research”⁵⁷. Rather, it is asking for adequate research to address uncertainty. I note in any event the Court in Crest, having made that comment, adjourned the hearing and required the applicant to provide additional evidence – which was done many months later.

⁵⁴ LPC Opening Submissions paragraph 42

⁵⁵ LPC Opening Submissions paragraph 48

⁵⁶ Evidence of Andrea Rickard dated 4 April 2017 paragraph 26

⁵⁷ LPC Opening Submissions paragraph 54

Consent duration

- 97 LPC proposes the capital dredging consent have a duration of 35 years.⁵⁸ There seems no good reason why this is necessary, and why anything more than 15 years, at most, is required. Mr O'Dea's responses to Commissioner Atkinson's questions in this regard were not persuasive. If LPC does really does need to 'catch up', then it needs to get on with it. If it is going to take longer than 15 years to start Stage 2, then the projections about growth in demand are incorrect. If that happens, the issue needs reconsidering. On any application for a replacement or renewal the consent authority must have regard to the value of the investment of the existing consent holder.⁵⁹
- 98 The consent for maintenance dredging should be for a maximum of 25 years, with provision for substantive and independent reviews at 5 yearly intervals. 25 years represents a generation and is an appropriate duration, given increasing understanding about the environment and best practice dredging.

Lapsing period

- 99 Ngāi Tahu accepts the need for a longer lapsing period than the statutory minimum, although 10 years appears unnecessary, at least to have given effect to Stage 1. A consent can be given effect to, even if not all aspect of it have been completed.⁶⁰
- 100 Whatever the lapse period, Ngāi Tahu seeks that the 'net gain' condition provide for those gains to begin to be actioned as soon as practicable after the grant of consent, and not have to wait until the dredging has been completed, or even started.

⁵⁸ LPC Opening Submissions paragraph 74

⁵⁹ Section 104(2A) RMA

⁶⁰ Biodiversity Defence Society Inc, v Solid Energy New Zealand [2013] NZHC 3783 (HC)

5 May 2017

A handwritten signature in dark ink, appearing to read 'M. Christensen', written in a cursive style.

Mark Christensen

Counsel for Ngāi Tahu

APPENDIX – BOND CONDITIONS

TAURANGA DREDGING CONSENT – ENVIRONMENTAL BOND

Note: This condition was imposed by the Environment Court in Decision [2011] NZEnvC 402, although there appears to be no discussion of it in the substantive decision.

20 Environmental Bond

- 20.1 The Consent Holder shall enter into a bond to ensure the remedy of any unforeseen adverse effects on the environment arising from the exercise of Coastal Consent No 6S807 or this consent and which become apparent for a period of up to five years after the Completion of the capital dredging.
- 20.2 The bond shall be in the sum of One Million Dollars (\$1,000,000.00) and shall be in favour of the Bay of Plenty Regional Council with an insurance company or bank approved by the Chief Executive of the Regional Council and carrying on business in New Zealand.
- 20.3 The bond is to be given By the Consent Holder before Coastal Consent No 65807 or this consent may be exercised. The Consent Holder shall forward a copy of the bond to the Chief Executive of the Regional Council prior to the commencement of works and shall forward evidence at the end of each twelve month period thereafter that the Bond remains in place.
- 20.4 The bond shall provide that:
 - The Consent Holder and the surety remain liable under the bond for the remedy of any unforeseen adverse effects on the environment arising from the exercise of Coastal Consent No 6807 or this consent and which become apparent for a period of up to five years after the completion of the capital dredging;
 - Unforeseen adverse effects are those effects not contemplated by or approved in the granting of Coastal Consent No 65807 or this consent. The question of whether there are any such unforeseen adverse effects is to be determined by the reasonable opinion of the Chief Executive of the Bay of Plenty Regional Council. Where the Consent Holder does not agree with the reasonable opinion of the Chief Executive of the Bay of Plenty Regional Council, that question is to be determined by a suitably qualified independent expert to be appointed by the Regional Council and the Consent Holder and that determination is to be binding;
 - In the event that it is necessary for the Consent Holder to remedy any such unforeseen adverse effects, any adversely affected natural features are to be remediated to their condition existing at the date of the grant of the consents, or to a condition that is agreed to by the Chief Executive of the Regional Council;
 - The bond may be used by the Chief Executive of the Regional Council to carry out any environmental rehabilitation Work necessary to remedy any unforeseen adverse effects, but the funds secured by the bond shall not be called upon and

utilised for that purpose unless the Consent Holder has first been given the opportunity to carry out such environmental rehabilitation work within a reasonable time and failed to do so;

- The form of the bond is to be approved by the Regional Council's solicitors, and the Consent Holder is to pay the Regional Council's reasonable costs associated with such approval and execution of the bond;
- The Consent Holder is to pay the Regional Council's reasonable costs associated with investigation under and implementation of the bond;
- Five years after the capital dredging authorised by this consent is completed, the Consent Holder shall prepare a review report summarising and interpreting the monitored effects and changes in comparison to those contemplated in the application for resource consent and accompanying Assessment of Environmental Effects. The Chief Executive of the Regional Council shall release the bond provided that:

(a) The Consent Holder has complied with the conditions of Coastal Consent No 65807 and this consent; and

(b) The review report confirms that there are no ongoing unforeseen adverse effects on the environment.

- 20.5 Non compliance with any conditions of Coastal Consent No 65807 or this consent may result in loss of all or part of the bond.

CHATHAM ROCK PHOSPHATE – PROPOSED BOND

Note: This decision was made under the EEZ Act which has its own section (65) on bonds, but it appears to be equivalent to s108A of the RMA. The application was declined. The EPA Panel in its decision said:

“The applicant’s offer of a bond left open a number of questions such as what would trigger the release of the funds and where the payments would go”.

Bond

61. Pursuant to section 65 of the Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 prior to mining activities commencing on the Chatham Rise, the Consent Holder must make provision for the maintenance of a bond in favour of the EPA for the purposes of:
- (a) remediating any long-term unexpected adverse impacts that might arise as the result of the Consent Holder’s mining operations; and
 - (b) monitoring the long-term adverse impacts associated with:
 - (i) the loss of benthic habitat as a result of seabed removal as part of the mining operations, including but not limited to the effectiveness

of hard-substrate recolonisation areas established by the Consent Holder;

- (ii) the extent of sedimentation deposition, and associated impacts on the benthic environment, as a result of the return of processed material to the seabed from the mining vessel;
- 62. The quantum of the bond must be sufficient to cover the estimated costs (including any contingency necessary), and any further sum the Chief Executive considers necessary, associated with the activities outlined in Condition 61 above.
- 63. The bond must be in a form certified by the Chief Executive in accordance with the requirements of these bond conditions, and be on the terms and conditions required by the Chief Executive.
- 64. The bond must be guaranteed by a guarantor acceptable to the Chief Executive. The guarantor must bind itself to pay for the carrying out and completion of any bond in the event of any default of the Consent Holder, or any occurrence of adverse impact requiring remedy.
- 65. Subject to the Chief Executive receiving notice of the Consent Holder's intention to commence mining in accordance with Condition 5, the amount of the bond must be fixed by the Chief Executive 3 months prior to mining activities commencing on the Chatham Rise and every fifth anniversary thereafter by the Chief Executive. The amount of the bond must be advised in writing to the Consent holder at least one month prior to the review date.
- 66. Should the Consent Holder not agree with the amount of the bond fixed by the Chief Executive, then the matter must be referred to arbitration in accordance with the provisions of the Arbitration Act 1996. Arbitration must be commenced by written notices by the Consent Holder to the Chief Executive advising that the amount of the bond is disputed, such notice to be given by the Consent Holder within two weeks of notification of the bond. If parties cannot agree upon an arbitrator within a week of receiving the notice from the Consent Holder, then an arbitrator must be appointed by the Arbitrators' and Mediators' Institute of New Zealand Incorporated. Such arbitrator must give an award in writing within 30 days after his or her appointment, unless the Consent Holder and the Chief Executive agree that time may be extended. The parties must bear their own costs in connection with the arbitration. In all other respects, the provisions of the Arbitration Act 1996 apply. Pending the outcome of that arbitration, the existing bond, if in place, must continue in force.
- 67. If the amount of the bond to be provided by the Consent Holder is greater than the sum secured by the current bond, then within one month of the Consent Holder being given written notice of the new amount to be secured by the bond, the Consent Holder and the guarantor must execute and lodge with the Chief Executive a variation of the existing bond or a new bond for the amount fixed on review by the Chief Executive. Activities authorised by this consent may not be undertaken if the variation of the existing bond or new bond is not provided in accordance with this condition.
- 68. The bond is to be released no more than 10 years after:
 - (a) the expiry, surrender, lapsing or cancellation of this consent; or
 - (b) the Consent Holder has advised the Chief Executive that all mining activities authorised by this consent have ceased and will not be resumed.

