

BEFORE THE HEARING COMMISSIONERS

IN THE MATTER OF the Resource Management Act 1991

AND An application APP- 1993001253.02 by Tararua District Council to Horizons Regional Council for resource consents associated with the operation of the Pahiatua Wastewater Treatment Plant, including earthworks, a discharge of treated wastewater into Town Creek (initially), then to the Mangatainoka River, a discharge to air (principally odour), and discharge to land via seepage, Julia Street, Pahiatua

AND a submission by Rangitāne o Tamaki nui a Rua Incorporated

PLANNING EVIDENCE OF PHILLIP HARRY PERCY

on behalf of Rangitāne o Tamaki nui a Rua Incorporated

Dated: 11 May 2017

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QUALIFICATIONS AND EXPERIENCE

1. My name is Phillip Harry Percy. I hold the degree of Bachelor of Resource and Environmental Planning with Honours from Massey University with a specialisation in physical geography. I hold a current Making Good Decisions certificate.
2. I have been practicing as a planner since 1998 (approximately 19 years). This has included working as a Resource Advisor (Policy) for Greater Wellington Regional Council, a Senior Planner for Eliot Sinclair and Partners in Christchurch and as a Senior Planner for Beca in Wellington. I am currently a Director of Perception Planning Limited, a resource management planning consultancy established in 2007 and which employs 10 professional staff.
3. I have been involved in a professional capacity in a wide range of planning matters including applications for large-scale subdivision consents, land use consents for dwellings, commercial buildings, earthworks and infrastructure projects including in the Palmerston North, Kapiti Coast, Wellington and Christchurch areas. I have experience in assessing proposals against both regional and district planning provisions and in both urban and rural environments. I have also been involved in resource consent applications for discharges to land, water and air and water take applications, including municipal wastewater discharges, winery waste discharges, and discharges of stormwater.
4. I have also acted for submitters on plan changes and resource consent applications including the Proposed Canterbury Land and Water Plan and resource consent applications for the Ruataniwha Water Storage Scheme in the Hawke's Bay.
5. I have significant experience in the development of RMA planning documents, both at regional and district level. In the local geographical area, this includes involvement in the development of, hearings and appeals on the Horizon Regional Council's One Plan and several plan changes to the Palmerston North City District Plan.
6. In 2016, I was the hearing commissioner for Plan Change 2016 to the Rangitikei District Plan, a plan change relating to advertising, historic heritage, natural hazards, building setbacks and re-zonings.

7. I have previously worked as a Planner in the United Kingdom including in consent processing, enforcement and monitoring roles.
8. I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed. I confirm that the issues addressed in this brief of evidence are within my area of expertise. I have specified where my opinion is based on limited or partial information and identified any assumptions I have made in forming my opinions.

Declaration of potential conflict of interest

9. The Application included a report by Wai Waste that summarises an initial assessment of options for land discharge. Site 2 in that assessment is jointly owned by my parents, Dale Percy and Wynne Percy.
10. I have prepared my evidence in a manner that ignores the connection I have with owners of Site 2, but I consider it important to draw the Commissioners' attention to the situation.

SCOPE OF EVIDENCE

11. I have been asked by Rangitāne o Tamaki nui a Rua Incorporated (Rangitāne) to prepare planning evidence specifically in relation to the matters raised in their submission on this application. The key matters raised in the Rangitāne submission are summarised as:
 - (a) Rangitāne seek to ensure that their values and aspirations for the environment are upheld and that the mana and mauri of freshwater is maintained or preferably enhanced.
 - (b) That the recommended consent term is for only 10 years, with a 5 year review.
 - (c) That continued work be put towards advanced operations for the wastewater discharge in line with a nil discharge to waterways.

(d) In future operations, Rangitāne would, through the monitoring and reporting procedures, like to be kept informed of the quality and quantity being discharged into our waterways.

12. My evidence therefore focuses on the planning matters that are within the scope of the Rangitāne submission. This means that I do not undertake a full evaluation of all relevant matters applicable to making a decision on this application. The planning analysis I provide below is intended to assist the Commissioners on the matters that I specifically deal with.

13. In the case of the Pahiatua WTP application, very similar concerns are present to those that I expressed in my evidence at the Eketahuna hearing. As requested by the Commissioners at that hearing, I have aimed to not repeat that same evidence here. As such, my evidence presented at the Eketahuna hearing should be considered to form part of my evidence for the Pahiatua hearing.

INTRODUCTION

14. In preparing this evidence, I have read and considered the following documents:

- (a) The resource consent application and accompanying reports.
- (b) The further information provided by the applicant in April 2017 including the additional resource consent application for earthworks and discharge to land from seepage associated with the proposed wetland.
- (c) The s42A planning and technical reports prepared by Horizons Regional Council (Horizons) staff – Fiona Morton (planning), Mike Patterson (water quality), Tim Baker (groundwater) and Deborah Ryan (air).
- (d) The planning and technical evidence prepared for the hearing by experts on behalf of the Applicant – John Crawford (wastewater engineering), Olivier Ausseil (water quality), Russel MacGibbon (wetland) and Tabitha Manderson (planning).
- (e) The technical evidence of Adam Canning (water quality) for Wellington Fish and Game Council.

- (f) The draft evidence of Manahi Paewai on behalf of Rangitāne-o-Tamaki-nui-a-Rua Incorporated¹.

PROPOSAL

15. The proposal is to discharge treated wastewater from the Pahiatua Wastewater Treatment Plant (WTP) initially to Town Creek (existing discharge point) and in the future via a wetland and discharge to a section of dry riverbed. The proposal also involves discharging contaminants to land where it may enter water via seepage from the base of the treatment ponds and the base of the proposed wetland. Ms Morton addresses the activity in Section D of her evidence and I understand from this, and from my reading of the information, that the application is as described in Ms Morton's Section's D and E.

STATUTORY AND POLICY SETTING

16. I generally agree with the statutory and policy setting described by Ms Morton in her evidence. I will not repeat that summary here.

KEY ISSUES RELEVANT TO RANGITĀNE SUBMISSION

17. Rangitāne's submission expressed their strong preference for treated wastewater to be discharged to land rather than to the Mangatainoka River. While the submission did not seek that the resource consent be declined, it highlighted the significant adverse effects of the proposal on the environment, including the relationships of Rangitāne and their culture and traditions with the river. Contrary to Ms Manderson's inference that because submitters did not request that consent should be declined that there is no grounds to do so, it is my opinion that where those significant adverse effects cannot be avoided, remedied or mitigated the Commissioners are entitled to not grant resource consent.

18. Rangitāne's submission sought that a consent term of 10 years would be acceptable, with a review of the consent at 5 years. They also requested to be provided with information and data associated with the on-going operation of the WTP and its effects.

ASSESSMENT OF OVERALL PROPOSAL

¹ Due to Mr Paewai's personal circumstances, he had not finalised his evidence at the time I completed my evidence.

19. The proposal has been set out in three separate sets of resource consent applications. Further information has also been provided in response to requests made by the Regional Council.
20. My reading of the technical reports and assessments presented by the Applicant and the Regional Council is, in a similar way to the Eketahuna WTP applications, there is insufficient information provided to enable a reasonable assessment of effects to be undertaken. The uncertain and incomplete information ranges from a lack of detail about the proposal itself (i.e. what is to be built, when it will be built, what its design will be based on) and the likely performance of different components of the WTP. There is unclear and incomplete data on the characteristics of the influent and effluent, both in terms of chemical determinants, flows and volumes. There is also a significant lack of information on the receiving environment and the actual and potential effects of the activity on it.
21. The evidence from the Regional Council's technical experts appears to consistently be that there is insufficient information to enable a reasonable conclusion on the actual and potential adverse effects to be reached. That makes it very difficult to evaluate the overall proposal in a planning sense, because the degree to which the proposal can be measured against policy and statutory outcomes is severely constrained by that lack of information.
22. In my opinion, there remains sufficient uncertainty as to the nature of the proposal itself, its performance and its potential adverse effects on the environment to enable a decision on the applications to be made. In my opinion, the Commissioners will need to ask the Applicant to provide further information to enable that assessment to be done, or decline the applications by relying on s104(6).
23. In the section of my evidence below, I set out some of the primary concerns I have with the current proposal. These areas of concern reflect the key matters where there is insufficient information to understand the effects of the activity, and which may assist the Commissioners in focussing any subsequent request for the Applicant to provide that information.

ASSESSMENT OF PROPOSED WETLAND AND ALTERNATIVE DISCHARGE LOCATION

Consents required

24. The original application specified that the consent required was “Discharge Permit to discharge treated wastewater to water under Rule 13-27 of the One Plan”. I note that there is no Rule 13-27 in the One Plan. Rule 14-27 is a permitted activity rule related to discharges of wastewater). At that time the applicant did not seek consent to discharge treated wastewater to land where it may enter water.
25. Subsequent to lodging the initial application, a further application was made to discharge wastewater to land where it may enter water. This specifically related to discharges from the base of the ponds.
26. The latest applications, which relate to the proposed wetland, relate to earthworks (to construct the wetland) and discharge to land where it may enter water, specifically relating to discharges from the base of the wetland.
27. The modification to the proposal to now discharge treated wastewater via the wetland and a an outfall into a section of dry river bed. While consent has been sought to discharge to land via the base of the wetland, no consent has been sought to discharge into the section of dry riverbed. Resource consent for that activity is also required under Rule 14-30 of the One Plan.
28. Ms Manderson (para 2.4) refers to legal advice received that the discharge is ultimately to the same receiving environment and therefore the application could proceed. She does not provide a copy of the legal advice. Such an approach does not recognise that the discharge location and method is changing, which means the discharge is now to land where it may enter water rather than directly to water. The discharge may also be directly to water depending on whether the old river channel into which the discharge is proposed is flowing. It is possible that the old section of river channel could hold standing water for periods of time after flood events², and the effects of discharging wastewater into that local environment have not been assessed. There are potential for localised adverse effects that were not considered in the original AEE.
29. There has not be an assessment of recreation use of the river in the vicinity. The Applicant proposes that a recreational use assessment is undertaken after resource consent is granted, however such an assessment is relevant and useful for understanding the potential adverse effects of the discharge at this stage, particularly

² See for example the backwater present in 2003 visible in Figure 1 below.

where it will be into a location that is potentially accessible by people such as anglers and bathers. This is particularly relevant given the proposed discharge point is moving upstream from the current discharge area.

30. While the need for the additional resource consent may seem a technicality, it influences subsequent steps in the consenting process including the notification assessment (see discussion below on notification).
31. In my opinion, an application needs to be made for the discharge from the proposed wetland to the section of dry riverbed, along with an appropriate assessment of effects on the environment.

Adequacy of assessment of effects of discharges

32. The application for earthworks and discharge consents for the proposed wetland includes this statement:

As such, this application needs to be read in conjunction with the previously lodged consents and further information response (dated 12 April 2017) as it is submitted that the potential environmental effects associated with the discharge of treated wastewater via seepage are described in these documents (ultimately a discharge to the Mangatainoka River). Volumes to be discharged will not ultimately be affected. The assessment of effects described in this document relate directly to the effects of the proposed earthworks.³

33. The discharge location and method are both changing significantly from the original proposal. Previously the discharge was directly to the river via the existing water intake structure, whereas the modified proposal involves discharging through the base the existing ponds, through the base of a proposed wetland and into a dry portion of the riverbed some distance downstream of the previous discharge point.
34. The effects from the subsequent applications cannot have been considered as part of the earlier applications purely by the fact that the applications did not exist at the time that the earlier assessment of effects on the environment was undertaken. The original assessment assumed that there would be no discharges other than from the locations specified in the original application. It therefore leads to a conclusion that the original

³ Section 1.1, pg 3

application did not assess the actual and potential effects from discharges in other locations.

35. The activities in question, being the discharge to land resulting from seepage of wastewater from oxidation ponds and the constructed wetland, have the potential to have broader environmental effects than just surface water quality as is alluded to in the application.
36. Mr Baker states (para 39) that the design and construction of the wetland will not address potential leakage from the oxidation ponds. Mr Baker also identifies (para 34) that leakage from the ponds has not had full treatment from the pond system or the proposed wetland and therefore has the potential to be of poorer quality than the treated discharge, and therefore has the potential for adverse effects on groundwater.
37. Mr Baker considers the application to be deficient (para 27) due to the lack of site specific data in respect to groundwater depth, flow direction or groundwater quality(para 26).
38. Ms Manderson (para 5.29) confirms that no additional specific evidence has been prepared in relation to groundwater. She says that “There is no evidence before me to suggest that potential effects of seepage from the ponds on groundwater would change considerably over time” and suggests that if monitoring shows no change in groundwater state then it should be discontinued. This neglects the fact that the current adverse effects (for which resource consent is sought) are unknown. The existing discharges are not part of the existing environment and therefore ‘no change’ from the current state is not an indication that there is no adverse effect being generated.

Notification assessment of wetland application

39. The earthworks component of this application is a controlled activity under Rule 13-2 of the One Plan. The rules specifically provides that “resource consent applications under [Rule 13-2] will not be notified and written approval of affected persons will not be required”.
40. The discharge to land component of the application, arising from seepage from the constructed wetland, is a discretionary activity under Rule 14-30 of the One Plan. I note that an incorrect reference to Rule 14-13 is included on Page 1 of the supplementary application.

41. Section 95A – 95F of the RMA outlines the requirement for the consent authority in relation to notification of the application. Section 95 specifies that the assessment in relation to notification must be made within 20 working days from the application being lodged.
42. At paragraph 30 of her evidence, Ms Morton states that “the three consents were publically notified in the Manawatū Standard (9 April 2016) and the Bush Telegraph (11 April 2016)”.
43. It appears from her subsequent paragraphs 31-33 that the discharge to water permit, the discharge to land permit relating to ground seepage from the oxidation ponds and the discharges to air were all notified at this time. However, it appears that no notification assessment has been undertaken for the discharge to land consent which formed part of the supplementary ‘wetland’ application.
44. Ms Manderson, at Section 6 of the supplementary application, does not mention or address the notification of the discretionary discharge of treated wastewater to land she only deals with notification of the controlled activity earthworks aspect of the supplementary consent
45. There does not appear to have been a notification assessment undertaken in relation to either the discharge to land via the base of the proposed wetland, or from the discharge to the section of old river bed. A notification assessment is an obligation (s95) and the consent authority must not grant a resource consent if the application should have been notified and was not (s3(3)(d)). Given that the proposed discharge location is on a different site, involves a different method of discharge, and has unknown but potentially more than minor adverse effects on the environment, it is probable that the applications should have been notified.
46. I also note that the wetland application did not contain the written approvals of the current landowner where the discharge is proposed. That indicates that limited notification as a minimum is necessary.

Discharge location

47. The wetland application describes the discharge location in the following way:

From the lined wetland the passage of the treated wastewater would follow the existing dry channel (believed to be ephemeral), which would in all

likelihood permeate through the gravels towards the river, in a similar manner to what currently occurs with the discharge into Town Creek.⁴

48. That description suggests that there has been little or no investigation as to the permeability, surface flow characteristics or sub-surface water flows. It suggests that the discharge from the wetlands will be to land (the bed of the Mangatainoka River or a tributary of it) and potentially also a discharge to water if the bed/tributary is carrying water at the time of discharge. The dynamics of how the discharge enters and therefore affects the river are uncertain, which makes it difficult to determine actual and potential effects. For example, if the discharge is occurring to water, will it meet the requirements of s70?

Effect of altered discharge method on monitoring sites

49. The wetland application refers to a portion of the wetlands being lined to prevent seepage from the base of the wetlands influencing the upstream river monitoring site. However, the Applicant has not undertaken groundwater flow analysis to determine whether this will be effective.

50. As noted in the April 2017 response to the further information request, there is a portion of Town Creek that has been assessed visually as gaining flows from groundwater. However there appears to have been no analysis by the applicant as to which direction this groundwater is originating from – whether it is flowing towards the river, parallel with the river, or away from the river. Mr Baker has made an educated assessment that groundwater is flowing towards the river, however the aerial photograph included in the wetland application (Figure 2 on page 6) shows the proposed wetland area and part of Town Creek on the inside of a relatively large meander in the river. The aerial photograph below, taken in 2003, shows the extent of a meander that appears to have been part of the activity channel until not long before the photograph was taken.

⁴ Pg 6



Figure 1: 2003 aerial photo of proposed wetland location Source: Google Earth

51. There is potential that the direction of groundwater movement in this area could be parallel to the river or potentially away from the river as the sub-surface flows ‘cut the corner’.
52. In sections 4 and 5 of the April 2017 response to the s92 information request, Ms Manderson describes her visual observations of changes in the flow rate of Town Creek (between the oxidation ponds and the Mangatainoka River). There appears to be no expert analysis of the increase and then significant decrease in flows in Town Creek.
53. This lack of information highlights the high degree of uncertainty of the movement of potential plumes of wastewater discharge beneath the site and therefore within the river. That in turn raises significant questions as to the adequacy of the proposed monitoring sites.

Effects of flooding

54. The proposed wetland site is within the flood hazard area shown in the Tararua District Plan (see figure below). There is no assessment in the application as to the probability of the wetland site being affected by flooding, either during construction or during operation.

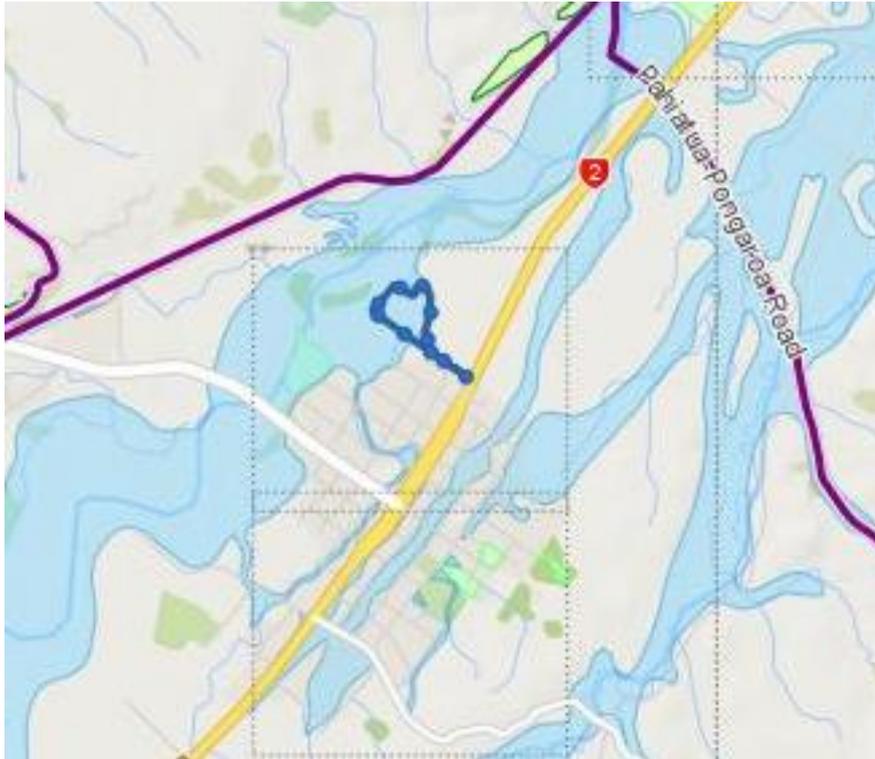


Figure 2: Extract from online Tararua District Plan planning maps. Light blue area shows flood extent.

55. Mr MacGibbon observes that (para 31):

“The land in the vicinity of the proposed wetland site is prone to seasonal and storm generated surface runoff and elevated water tables. Existing drainage channels need to be retained and possibly reinforced to ensure surface runoff, especially flood flow, does not enter the wetland. Newly established wetlands, in particular, are vulnerable if exposed to substantially increased flood flows.”

56. That passage suggests that the effectiveness of the proposed wetland is susceptible to flooding, both in terms of the through-flow of water but also the effects of a large flood event which may cause scouring of the wetland and potential impact through deposition of sediment. The applicant has provided an assessment of the effects of flooding on the infrastructure, nor of the downstream effects that may occur if floodwaters enter the wetland facility either during construction or during operation.

Effects of elevated groundwater levels on the wetland

57. Mr Baker notes (para 17) that his observation of the area for the proposed wetland is boggy with wetland grass species present. He says this observation may indicate that

this land is often wet and waterlogged, and may also be a reflection of a high groundwater table. While the contour data provided in the wetland application does not extend out as far as the river bed, it does indicate that areas of the proposed wetland site are likely to be at or near the water level in the river, particularly during higher flows.

58. The Applicant does not evaluate what effect high groundwater levels, potentially above the base of the proposed wetland, would have on wetland functioning and discharge quality.

59. In some places the Applicant's evidence and reports talk about "lined wetland" (S.92 response section 2) and other places they talk about the wetland being partially lined. It is not clear whether the proposed wetland is to be partially or fully lined.

60. Mr MacGibbon states at para 18 that "*constructed nutrient treatment wetlands do not need to be lined or impervious to function well*" but that in situations where existing "*groundwater quality is high and needs to be protected, it may be necessary to line a wetland either with clay or a synthetic liner*" (para 19). He then goes on to say, at para 20, that the re-establishment of topsoil over a synthetic liner can be problematic and (at para 21) similar problems can occur with a clay liner. He recommends that for highly permeable substrates such as riverbed gravels, that a low permeability layer to reduce the rate of water loss is preferable to an impermeable layer, including in the form of a clay based soil layer.

61. Mr Baker (para 16) states that due to the limited information available about the wetland:

"it is difficult to provide an assessment of the effects in relation to groundwater as a result of the partially clay-lined wetland because the likely level of treatment and potential seepage rates are unknown".

62. In my opinion, there is insufficient detail on the potential interaction of the proposed wetland with groundwater. This includes the degree of discharge of treated wastewater from the wetland as well as the influence of groundwater on the integrity of any liner and on the efficacy of the wetland itself in terms of wastewater residence times.

63. The primary objective that Policy 5-11 of the One Plan is designed to achieve is avoiding the direct discharge of wastewater to water because of the adverse effects it has on mauri, mahinga kai, and cultural and traditional relationships Māori have with the environment. The current proposed wetland, if it is highly connected to groundwater close

to the Mangatainoka River, is unlikely to be effective in meeting the requirements of Policy 5-11. The wetland will potentially be a direct conduit for treated wastewater to groundwater and surface water, which does not satisfy the need for wastewater to pass through land to be 'cleansed'.

Long-term effectiveness of the wetland

64. Mr MacGibbon considers that:

“Constructed treatment wetlands require regular on-going maintenance in order to continue to function at optimal levels, and once the wetland vegetation reaches maturity further maintenance is necessary to prevent a gradual fall off in nutrient extraction performance.”

65. He states that in a worst case scenario, a lack of maintenance can result in wetlands actually “shed[ing] more organic matter (and therefore more N and P) than they produce”.

66. There is no reference in the application to the regular maintenance requirements in paras 39 and 40 nor does Ms Manderson propose conditions relating to the on-going maintenance of the wetland. In my opinion, if the wetland is to form part of the consented activities, conditions need to be included for wetland maintenance and management including either or both of the options suggested by Mr MacGibbon.

Adequacy of options assessment

67. The Applicant has provided documentation of alternative treatment and discharge options for the Pahiatua WTP. Those documents include a memo from Paul King (Opus) to Dave Watson dated 11 March 2014 and a report from Wai Waste dated July 2013.

68. The Opus memo concludes that:

- (a) sole discharge of wastewater to land without any parallel discharge to water at a minimum would require 96,000m³ of extra storage.
- (b) Parallel discharge to water via Town Creek would require 25,000m³ of extra storage.

69. I make the following observations of the Opus memo:

- (a) The analysis of volume assumes discharge to land capacity of 1400m³/day and 1840m³/day. That does not take into account the opportunity for more wastewater

to be discharged to land on Site 2, which is the preferred site in the Wai Waste report and has approximately 43ha of land potentially available.

- (b) The calculations assume an average monthly and daily flow respectively of 55,526m³ and 1,821m³ based on the flows for January to May 2012. Those average flows are acknowledged in the report as being influenced by an unusually high flow recorded in January 2012. Those average flows are significantly higher compared to the average daily flows from June 2014 to June 2016 which were 780m³/day⁵. The original application assumes a conservative average daily flow of 550m³/day⁶.
- (c) The analysis appears to assume that any additional storage would need to come from new storage facilities rather than rationalisation of the existing ponds, including whether all three ponds would still be required for initial treatment where a discharge to land approach is used.
- (d) The memo misquotes the Wai Waster report by saying that Site 2 would result in a daily application rate of 15mm/day, which was considered high. However the Wai Waste report said that an application rate of 14.75mm/day would be required if the available land areas was 9.5ha. An application rate of 5mm/day would require 28 hectares⁷. The potentially available land area in Site 2 is 43ha.

70. I make the following observations of the Wai Waste report

- (a) The report does not include potential income opportunities that could be derived from the use of the irrigated land
- (b) The report does not consider and compare costs associated with other treatment and discharge options such as those currently proposed.
- (c) The report recommends a more detailed analysis be undertaken of the preferred site, however this does not appear to have been undertaken.

71. At section 1.11.1 of the original application, a summary of the land discharge option is discussed. The section concludes with the following statement:

⁵ Para 7.7, Evidence of John Crawford

⁶ Section 1.3.3

⁷ Section 5.0, Wai Waste report

The memo states that “In summary we would suggest that the discharge to land is not a cost effective option for this site as this relies on relatively high application rate and this would still require significant temporary storage when any non-irrigation conditions occur (i.e. heavy rainfall occurs).”

72. Noting my observation of the respective reports above, particularly the inaccurate loading rates assumed for Site 2 in the Opus memo, the conclusion drawn on the unsuitability of the land disposal option appears incorrect and cursory. Given the significance of the actual and potential adverse effects and the costs involved in the current proposal, that level of analysis is inadequate in my opinion and does not enable the Commissioners to establish a reasonable understanding of the alternative discharge method in accordance with s105(1)(c) of the Act.

73. I also note that the Applicant has not returned to re-evaluate the land discharge option now that the wetland option has been proposed. As the applicant’s consultant acknowledges, the wetland has not been proposed to improve the quality of the discharge and the report underpinning the wetland proposal raises a number of challenges that would need to be addressed to ensure the wetland performed adequately. That would indicate that some further cost-benefit analysis of discharge and treatment options would be useful.

ASSESSMENT AGAINST THE ONE PLAN OBJECTIVES AND POLICIES

74. Mr Paewai explains in his evidence that the reference to Papatūānuku in the submission from Rangitāne relates to the earth in its broadest sense, rather than being limited only to land or soil. Mr Paewai explains that water flows through Papatūānuku like blood flows through a person’s body⁸. The interconnected nature of water and land are represented by Papatūānuku and Rangitāne’s submission point is intended as an expression of the relationship of Rangitāne, and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga. These are matters of national importance set out in s6(g) of the Act that must be recognised and provided for when exercising functions and powers under the Act in relation to managing natural and physical resources.

75. The adverse impacts of previous resource management regimes on the relationship Rangitāne (and other iwi) have with the environment are clearly documented in Section 2.2 of the One Plan, which describes the Te Ao Maori

⁸ Para 29

resource management issues for the Region. The consequences of historical resource use decisions on Rangitāne traditions and values are further explained in Mr Paewai's evidence. The community's (including iwi) expectations of the response to those resource management issues is set out in the objectives and policies of the One Plan. The One Plan documents the framework for achieving integrated management for the Region and, as such, the response to the Te Ao Maori issues is implemented through objectives, policies and other provisions spread throughout the other topic-specific chapters of the Plan.

76. The interconnections between the Te Ao Maori issues and the provisions of the One Plan that address them are usefully summarised in Table 2.1 in Section 2.4 of the One Plan, and highlight that implementing a range of provisions relating to surface water, ground water, discharges, land use management, biodiversity, landscapes and historic heritage is necessary for those issues to be resolved.
77. Dealing first with the objectives and policies in Chapter 2 of the One Plan, in the context of the Pahiatua WTP proposal, there has been a cultural impact assessment prepared that relates to the proposal as first described in the original application. There has been no further refinement of the cultural impact assessment to consider the modified proposal now being assessed.
78. At paragraph 16.7 of her evidence Ms Manderson states "*in my opinion the proposal is not inconsistent with the relevant objectives and policies of the One Plan, acknowledging it is challenging to form an opinion with regard to the policies that relate to Te Au Māori (sic). Further evidence from iwi submitters at the hearing should assist in assessing the objectives and policies contained in Chapter 2 of the One Plan in particular*".
79. In my view, Ms Manderson's conclusion highlights that the resource consent application and assessment of environment effects is deficient and does not meet the requirements of s88 and Schedule 4 of the Act. Specifically in relation to cultural and spiritual effects, Clause 7 of Schedule 4 requires that an assessment of effects *must* address:
- (a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects:

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations:

80. While the point at which the consent authority can reject the application as incomplete has passed, I raise the point to emphasise that the scheme of the Act is for the Applicant to undertake an appropriate assessment of effects at the beginning of the process rather than relying on submitters to fill in the gaps through evidence at the hearing. Mr Paewai's evidence provides good context and succinctly summarises the significant values as he understands them, however his evidence should not, in my view, be treated as a substitute for a proper assessment being undertaken by the Applicant.

81. Mr Paewai's evidence sets out some of the cultural and traditional relationships Rangitāne has with the Mangatainoka River and its catchment. The relationships rely both on physical human interaction with the waterways, as well as non-physical relationships and traditional connections with rivers and other features of the environment as spiritual entities and tupuna. Mr Paewai explains the way in which physical impacts on the river affect its wairua and mauri, how they impact on traditional relationships such as mahinga kai, and how the health and well-being of the river has a bearing on the health and well-being of the land and people.

82. Importantly, Mr Paewai summarises the primary actual and potential adverse effects of the Pahiatua WTP discharge in his evidence. He draws the conclusion that the existing discharge has significant adverse effects on the mauri and wairua of the Mangatainoka River and the rivers it flows into, on Rangitāne's cultural and traditional relationships with the Mangatainoka River, and on Rangitāne iwi itself. He further considers that the proposed upgrades and installation of the proposed wetland are unlikely to resolve these adverse effects because:

- (a) there are likely to be continued discharges of contaminants to the river and related groundwater through seepage from the ponds and wetland, and
- (b) the contributions of nutrients and other contaminants in combination with other discharges into the catchment will continue to have significant

adverse impacts throughout the catchment on mahinga kai and the mauri of the waterways.

83. In my view, the effects of the proposal as described by Mr Paewai make it inconsistent with Objective 2-1 (b) of the One Plan, which is that:

84. *'Kaitiakitanga^ must be given particular regard and the relationship of hapū* and iwi* with their ancestral lands^, water^, sites*, wāhi tapu* and other taonga* (including wāhi tūpuna*) must be recognised and provided for through resource management processes.'*

Policy 2-2

85. Importantly, Mr Paewai refers to a number of sites on or connected to the Mangatainoka River downstream of the WTP discharges that are regarded as wāhi tapu, wāhi tūpuna or as other sites of significance. Policy 2-2(a) of the One Plan is expressly directive that identified wāhi tapu, wāhi tūpuna or other sites of significance⁹ *must be protected from inappropriate subdivision, use or development that would cause adverse effects on the qualities and features which contribute to the value of these sites'*

86. Policy 2-2(a) applies a strong requirement to protect sites with significance to Rangitāne and other iwi. The effects that the sites are to be protected from are those that will impact on the qualities and features which contribute to the value of the sites. That, in my view, requires protection of both the sites themselves as well as other aspects, both physical and perceptive, that contribute to making those sites significant.

87. By way of example, Mr Paewai has explained in his evidence how discharging human waste into the Mangatainoka River will impact on the mauri of the river.

'The mauri of Papatūānuku and in turn the Mangatainoka River will be directly and severely impacted by the proposed discharges. Once the mauri is impacted then according to our tikanga and values a serious imbalance will occur, impacting on waiora, mahinga kai, our kaitiaki

⁹ Policy 2-2(a) applies specifically to sites recorded on the publicly available registers specified in the policy. The sites referred to by Mr Paewai are not currently listed on those registers but are in the process of being compiled and catalogued in order to do so. This site recording project is summarised on pages 26 to 28 of the Te Kāuru Taiao Strategy published by Rangitāne in November 2016.

responsibilities and our relationship with the Mangatainoka River itself as a living, breathing taonga”.

Policies 2-1 and 2-3

88. Policy 2-1 of the One Plan directs that the ‘Regional Council must enable and foster kaitiakitanga^ and the relationship between hapū* and iwi* and their ancestral lands^, water^, sites*, wāhi tapu* and other taonga* (including wāhi tūpuna*) through increased involvement of hapū* and iwi* in resource management processes’. (my emphasis). The policy includes a non-exhaustive list of measures to support achieving this outcome. Connected to Policy 2-1 is Policy 2-3, which requires that the Regional Council must have regard to the mauri of water by implementing Policy 2(a) to (i).
89. The evidence of Mr Paewai is that the relationship hapū and iwi have with the Mangatainoka River and the important sites and traditions associated with it and the catchment, are adversely impacted by both past and current use and development. He also explains in his evidence how discharges of human waste and deterioration of the river adversely affect mauri.
90. The policy direction is that hapū and iwi must be involved in resource management processes, which includes, in my view, both being engaged with by applicants when considering proposals, but also by being provided with sufficient information to be able to effectively contribute as participants in the resource consent assessment process. That requires sufficient information to be provided by applicants in applications and assessments of effects to enable hapū and iwi to understand the character, scale and effects of a proposal in order to determine how a proposal may impact on their relationships with significant sites and the environment more widely.
91. Given the lack of detail about the performance of the Pahiatua WTP, both in its current format and after potential future changes, iwi are unable to properly understand and evaluate the effects of the proposal on their responsibilities as kaitiaki and on their relationships with the environment. In my opinion, that lack of information and impact on their ability to engage meaningfully in management of the Mangatainoka River is not consistent with enablement. Furthermore, the potential adverse effects of the discharge from the Pahiatua WTP have significant potential to adversely impact on Rangitāne’s relationship with their land, sites and other taonga and therefore do not enable that relationship. In my opinion, this

results in the proposed approach to the potential upgrade of the Pahiatua WTP being inconsistent with Policy 2-1.

92. At para 8.6 of her evidence, Ms Manderson notes that a *“forum has been agreed to, which I consider is a clear mechanism for the sharing of information as well as the ongoing work in considering the BPO for this site in the future”* and that this *“would go some way towards meeting the relevant Objectives and Policies identified in Chapter 2”*. I agree with Ms Manderson’s statement but emphasise her position that the forum would only go some way towards meeting the requirements of the objectives and policies of Chapter 2. In actuality, the approach results in the following outcomes:

- (a) It seeks to understand hapū and iwi issues *after* resource consent has been granted, and
- (b) Three separate iwi submissions have identified that there are, and are likely to be, adverse effects on the mauri of water resulting from this proposal and these issues cannot be addressed with certainty through the imposition of consent conditions.

93. Overall, it is my view that the proposal, and the processes associated with the management of it, are not consistent with Policy 2-1.

One Plan Chapter 5 objectives and policies

Policy 5-11

94. Of particular relevance to Chapter 5 is the consideration of cultural and traditional values associated with the awa in Policy 5-11 of the One Plan. Mr Paewai explains in his evidence why direct discharge of human waste to water has significant adverse effects on the culture, traditions and relationships Rangitāne have with Papatūānuku.

95. Ms Morton addresses Policy 5-11 from paragraph 134 of her evidence. I note at paragraph 140 Ms Morton states that the additional wetland *“appears to be a means of mitigating the effects of human sewage discharge”* and that, in respect of Policy 5-11(ii), Ms Morton considers *“that the wetland proposal is consistent with this part of the policy”*. Ms Morton states further that she is unclear *“how far the design of the wetland goes to address the adverse effects on the mauri of the receiving water body”*.

96. I agree with Ms Morton that local iwi are the most appropriate party to determine whether the proposed wetland method is an appropriate method of protecting the mauri of the Mangatainoka River.
97. I am not satisfied that the wetland is more than a token gesture. The wetland as proposed has the effect of passing wastewater through a 300-500m deep body of wastewater. Other than the wastewater passing through the base of the wetland, the proposal is essentially a shallow treatment pond. There remain significant questions about how much transmission of wastewater will occur through the wetland, particularly if it is only partially lined. There is also a possibility that groundwater levels will be high enough to effectively result in the discharge of treated wastewater directly to groundwater. Given the close proximity of the discharge to the river itself, there is a high potential for the wastewater to be discharged directly to sub-surface water that effectively forms part of the flowing river.
98. This is clearly highlighted in Ms Manderson's evidence where she suggests that the discharge is into the same receiving environment as described in the original application, and that the effects of any seepage from the ponds or wetland will be evident at the downstream monitoring site. That strongly suggests to me that the modified proposal remains a discharge of treated wastewater into the Mangatainoka River.
99. In my opinion, the underlying purpose of Policy 5-11 is to require local authorities to move away from discharging wastewater directly to waterbodies. That may not necessarily be irrigating wastewater to land – there may be other solutions – however solutions to meet Policy 5-11 need to respond to the outcome that the policy is trying to implement. I do not consider the proposed wetland satisfies any of the fundamental outcomes envisaged by Policy 5-11.
100. The Applicant has indicated that some initial consideration was given to land discharge options, however those were not pursued beyond a very high-level assessment. The rapid discarding of those options without the further investigation recommended in the Wai Waste report, or questioning the accuracy of the Opus memo, is not consistent with the incentive that Policy 5-11 creates for WTP decision-making. My recommendation is that the Applicant undertake some meaningful analysis of the discharge to land options available to them.

101. Clause (b) of Policy 5-11 is very directive and unequivocal in its drafting. The policy directs that the discharge must change to a treatment system described under (a) on renewal. To meet this policy, it is my view that the proposal for which resource consent is sought must be explicit in how the proposed wetland element of the WTP will meet this requirement. At present the application is not clear if or how the policy will be achieved, and by when. The proposal is currently inconsistent with this directive policy.

SECTION 107

102. Section 107 of the Act provides a set of basic safeguards that apply to the decision as to whether or not to grant a consent that involves a discharge to water. While not expressly stated in the section itself, several of the effects listed in s107(1) are relevant to values Rangitāne associate with water bodies in the area.

103. In particular, the concept of mahinga kai requires healthy water and a healthy and abundant ecosystem. Rangitāne also consider the land, rivers, and other features of the landscape in the Manawatu catchment as a tūpuna (Papatūānuku) and therefore degradation of the appearance, quality and health of the water in the rivers and the ecosystems they support reflects an adverse effect on that ancestor. The matters described in s107(1) are observable physical manifestations of river degradation and therefore indicate an adverse effect on the river itself and, in turn, an adverse effect on the cultural and traditional relationship Rangitāne have with the river.

104. Ms Morton summarises her evaluation of the proposal against the requirements of s107 in her s42A report¹⁰. She refers to Mr Patterson's evidence where he is of the view that pH, temperature and QMCI do not indicate concerns in respect of the effect of the discharge. However Mr Patterson concluded that the impact of the discharge of dissolved oxygen levels is more difficult to determine. Mr Patterson was unable to confirm the impact of the discharge on dissolved oxygen levels based on current data and recommended that continuous monitoring be undertaken upstream and downstream of the discharge

¹⁰ Paras 179 to 184.

following completion of the upgrades to determine the influence of the discharge on the severity of DO fluctuations¹¹.

105. As discussed above, I consider that there is currently insufficient information on the characteristics and effects of the discharges to enable a complete s107 assessment to be completed.

CONSENT TERM

106. In my opinion, if resource consent is to be granted, a significantly shorter term than requested in the application is necessary. While I understand the benefits that a longer term consent provides to the Applicant in terms of investment certainty and reduced consenting costs, the high level of uncertainty and fluidity associated with the current proposal means that it is necessary to comprehensively re-evaluate the proposal as details are refined. As noted below, some of the possible modifications and additions to the WTP that are being suggested in evidence presented on behalf of the Applicant are likely to require detailed examination both as to their effectiveness but also the actual and potential effects of their development and commissioning.

107. An important part of the New Zealand resource management system is the ability for people and groups representing their own interests or interests more widely to be involved in determining how development that affects those interests will be managed. The resource consent process, with associated decisions as to who is potentially affected, notification, and a transparent decision-making process, is the primary mechanism for this to occur. In my view, a proposal that involves significant unknown modification over time should be subject to a short term consent regime to allow appropriate engagement by stakeholders in the decision-making process. That sentiment is reflected in Policy 2-1 of the One Plan, which focuses on enabling iwi and hapu engagement in resource management processes.

108. Given the uncertainty associated with the current proposal, if resource consent is able to be granted, it will be necessary to use conditions of consent to explicitly direct the consent holder to undertake investigations and other work to provide more certainty for future decision-making on subsequent applications.

¹¹ Para 99 Patterson evidence

COMMENTS ON DRAFT CONDITIONS

109. With regard to the draft conditions offered by Ms Morton, I do not consider that these assist in resolving the fundamental lack of information required to properly assess the application at this point in time. While gathering further information through consent conditions can assist in better understanding the nature and effects of an activity, relying on conditions to 'fill in the gaps' in an initial assessment of the proposal is not appropriate in my view. This is especially the case where the response to the further information is unknown.
110. The draft conditions provided by Ms Morton include a forum, which, as I understand it, is intended to provide an engagement opportunity for parties involved in this resource consent process to be provided with information as more data and details of the modifications to the WTP are developed. While I have no difficulty with an information-receiving forum as a concept, it does not resolve the fundamental issue that affected parties will be constrained in their ability to exercise their normal rights of assessment, evaluation, representation to decision-makers, and ultimately the right to appeal decisions.
111. As noted above, the proposed conditions do not include any direction around the performance and management of the proposed wetland. These would be a necessary addition if resource consent was to be granted.

CONCLUSIONS

112. There is insufficient information provided by the applicant to be able to reasonably determine the scale of the actual and potential effects beyond the current WTP format. Proposed modifications to the system are unclear and their scale, timing and effectiveness are uncertain or, at best, theoretical.
113. The Applicant has not provided an adequate assessment of the actual and potential effects of either the current discharge or future discharges on the relationship of iwi, and their culture and traditions, with their ancestral lands, water, sites, waahi tapu, and other taonga. While a cultural impact assessment was prepared and lodged with the original application, this appears to have had little bearing on the proposal design. The only evidence on these effects has been provided by submitters, and the conclusions drawn by Manahi Paewai are

that there are potentially significant adverse effects on those values and relationships.

114. The proposal is inconsistent with a significant number of objectives and policies in the One Plan. This includes the objectives and policies of Chapter 2 – Te Ao Maori and Chapter 5 – Water. Applying the approach in the *R J Davidson Family Trust* decision, that is a strong indicator that granting resource consents to the activity as currently proposed would be inconsistent with achieving sustainable management.
115. Based on the limited information available, it is possible that the proposal will meet the obligations set out in s107 of the Act. There is no certainty as to whether those requirements are likely to be achieved within the reasonably foreseeable future. On that basis, the resource consents involving discharges to water are not able to be granted.
116. Granting consent on the basis that it will be an interim step towards the Applicant designing a comprehensive WTP would require a set of specifically crafted conditions designed to direct the Applicant to develop a detailed proposal and associated assessment of effects. Conditions would also be required to ensure that the adverse effects on the environment are no greater than at present. If such a consent is granted, my opinion is that it should be for a term of no more than five years.
117. Based on the evaluation I have set out in my evidence above, the following factors indicate that resource consent should not be granted:
 - (a) There is insufficient information to determine the application.
 - (b) The activity is likely to have significant adverse effects on the environment that cannot be avoided, remedied or mitigated by conditions of consent.
 - (c) The activity currently has and is likely to have significant adverse effects on the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga.
 - (d) The activity is unlikely to meet the requirements of s107 of the Act.

(e) The activity is inconsistent with a number of the objectives and policies of the One Plan.

Phillip Percy

DATED this 11 May 2017