

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of applications by Waka Kotahi NZ Transport Agency (Waka Kotahi) to Manawatū-Whanganui Regional Council and Greater Wellington Regional Council for resource consents to enable the construction, operation and maintenance of new state highway, shared use path and associated infrastructure, between Taylors Road (to the north of Ōtaki) and Stage Highway 1 north of Levin.

SECTION 87F REPORT OF MARK LESLIE ST.CLAIR – PLANNING

MANAWATŪ-WHANGANUI REGIONAL COUNCIL AND GREATER WELLINGTON REGIONAL COUNCIL

28 April 2023

TABLE OF CONTENTS

A.	OUTLINE OF REPORT	4
B.	QUALIFICATIONS / EXPERIENCE	5
C.	CODE OF CONDUCT.....	6
D.	EXECUTIVE SUMMARY	7
E.	SCOPE OF REPORT	8
F.	BACKGROUND.....	9
G.	APPLICATION FOR RESOURCE CONSENTS	10
	Notices of Requirement.....	10
H.	REVIEW OF APPLICATION.....	10
I.	FURTHER INFORMATION AND INFORMATION GAPS	17
J.	NOTIFICATION / SUBMISSIONS / WRITTEN APPROVALS.....	18
K.	LOCATION – EXISTING ENVIRONMENT.....	19
L.	PROPOSED ACTIVITY	20
M.	STATUTORY CONSIDERATIONS.....	24
	Section 104.....	24
	Matters relating to the grant of discharge permits.....	26
N.	ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT	27
	Air quality	27
	Hydrology and Flooding (Stormwater Quantity) Effects	29
	Hydrology and Groundwater Effects.....	31
	Freshwater – effects on water quality and ecology	35
	Operational Stormwater Quality	39
	Land Disturbance/ Earthworks/Sediment Control	41
	Terrestrial ecology and wetland ecosystems	45
	Landscape and Natural Character.....	47
	Surface water takes	48
	Waitohu Stream - GWRC	49
	Ōhau River, and Koputaroa, Waikawa, Manakau and Waiauti Streams Assessment	51
	Contaminated Land.....	54
	Cultural effects	55
	Positive Effects	59
	Summary of actual and potential effects on the environment	60
O.	STATUTORY ASSESSMENT	61
	National Environmental Standards (NES)	61
	NES for Freshwater.....	61
	NES for Air Quality	62
	NES for Assessing and Managing Contaminants in Soil to Protect Human Health	63
	NES for Sources of Human Drinking Water.....	63
	National Policy Statements (NPS).....	65
	NPS for Freshwater Management.....	65
	Horizons Regional Policy Statement and Regional Plan (One Plan) ..	69
	Horizons Regional Policy Statement (RPS).....	70
P.	OPERATIVE REGIONAL PLAN (ONE PLAN)	78
	Regional Plan – Policies.....	78
	Summary of the One Plan	85
	GWRC Regional Policy Statement (RPS)	86
	GWRC Regional Policy Statement – Plan Change 1 (GWRC RPS PC1)	91
	GWRC Proposed Natural Resources Plan (PNRP)	93

	Summary of objectives and policies analysis under the Regional Plans	103
	District Plans	103
	One Plan and PNRP Rules	104
	Overall Activity Status	105
	Section 104(1)(C) Other Relevant Matters	105
	Section 104 D Non-complying activity status	105
Q.	ASSESSMENT AGAINST RMA PROVISIONS	107
	Section 104G - Consideration of activities affecting drinking water supply source water	107
	Section 105	107
	Section 107	109
	Part 2 Assessment: Sections 5 – 8	110
	Section 6 – Matters of National Importance	111
	Section 7 – other matters	112
	Section 8 – Treaty of Waitangi (Te Tiriti o Waitangi)	113
R.	CONCLUSION	113
S.	TERM	114
T.	CONDITIONS	121

A. OUTLINE OF REPORT

1. This report, required by section 87F of the Resource Management Act 1991 (“**RMA**”), addresses the issues set out in sections 104 to 112 of the RMA, to the extent that they are relevant to the applications lodged with the Manawatū-Whanganui Regional Council (“**Horizons**”) and Greater Wellington Regional Council (“**GWRC**”).
2. The resource consents applied for, by Waka Kotahi NZ Transport Agency (“**Waka Kotahi**”), are required to authorise the construction, operation and maintenance of new state highway, shared use path and associated infrastructure, between Taylors Road (to the north of Ōtaki) and State Highway 1 north of Levin. The project is known as the Ōtaki to North of Levin Highway Project (the “**Ō2NL Project**”).
3. In addition, the Transport Agency separately lodged Notices of Requirement (“**NoRs**”) relating to the Ō2NL Project with Horowhenua District Council and Kāpiti Coast District Council (the “**District Councils**”), respectively.
4. This report addresses planning issues with regard to the resource consent applications lodged with Horizons and GWRC (referred to as the “**Regional Councils**” at times in this report). Matters relating to the NoRs are outside the scope of this report, and are being addressed by technical advisors for the District Councils.
5. In preparing this report, I have relied on the expert advice from the following technical advisors:
 - (a) Mr James Lambie – Terrestrial Ecology (Appendix 2);
 - (b) Mr Logan Brown – Water Quality and Aquatic Ecology (Appendix 3);
 - (c) Mr Peter Kinley – Hydrology and Flooding (Appendix 4);
 - (d) Mr Jon Williamson – Hydrogeology and Groundwater (Appendix 5);
 - (e) Mr Kerry Pearce – Erosion and Sediment Control (Appendix 6);

- (f) Ms Julia Williams – Natural Character (Appendix 7);
- (g) Mr Peter Stacey - Air Quality (Appendix 8);
- (h) Mr Stu Farrant – Operational Stormwater Management (Appendix 9);
- (i) Mr Mike Thompson - Water Takes – GWRC (Appendix 10);
- (j) Ms Michaela Stout – Water Takes – Horizons (Appendix 11); and
- (k) Ms Sarah Newell – Contaminated Land (Appendix 12).

6. While this report is pursuant to section 87F of the RMA, I have in accordance with section 42A(1A) and (1B) attempted to minimise the repetition of information included in the application and where I have considered it appropriate, adopt that information.

B. QUALIFICATIONS / EXPERIENCE

7. My name is Mark Leslie St Clair. I am sole planning practitioner based in Wellington. From 2001 till 2022, I was a director of Hill Young Cooper, a Planning and Resource Management consultancy firm. I hold a Bachelor of Resource and Environmental Planning, with first class honours, from Massey University.
8. I have more than 30 years' experience in planning practice in local government (Lower Hutt City Council and Manukau City Council), central government (Ministry for the Environment) and private practice (Connell Wagner, Manukau Consultants Ltd, GHD Ltd, and Hill Young Cooper).
9. I have been a full member of the New Zealand Planning Institute since 1996, and between 1996 and 1998 I held the position of chair of the Auckland Branch of the New Zealand Planning Institute and from 1998 to 2000 I held the elected position of National Councillor for that Institute. In 2018 I received the Distinguished Service Award from the New Zealand Planning Institute for services to the profession.
10. Projects of relevance I have been involved in include:

- (a) Conditions Advisor – Nga Uranga ki Pito-One – Te Ara Tupa, Waka Kotahi for shared (walking and cycling) pathway under Clause 2(1) of the COVID-19 Recovery (Fast-Track Consenting) Act 2020 (2020/21);
 - (b) Commissioner (Sole) – Palmerston North City Council/Manawatu Whanganui Regional Council – Proposed Quarry – 971 Fitzherbert East Road, Palmerston North (2020/21);
 - (c) Section 87F reporting planner for Horizons - Te Ahu a Turanga – Manawatū Tararua Highway (2019/20);
 - (d) Friend of Submitter – Environmental Protection Authority, NZTA Basin Bridge Proposal – Notice of Requirements and Resource Consent (2013/14); and
 - (e) Friend of Submitter – Environmental Protection Authority, NZTA Transmission Gully Proposal – Notice of Requirements and Resource Consent (2011).
11. I have been engaged by Horizons and GWRC to provide planning expertise on resource consent applications by Waka Kotahi for resource consents associated with the construction, operation and maintenance of the Ō2NL Project. I first became involved with the applications in April 2021 by way of a request from Horizons.
12. I am familiar with the site and surrounding area and I undertook a site visit of the proposed route on 24 August 2022 with representatives of Waka Kotahi and members of the Regional Council and District Councils' reporting teams.

C. CODE OF CONDUCT

13. I confirm that I have read and agree to comply with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. I confirm that I have stated the reasons for my opinions I express in this report, and considered all the material facts that I am aware of that might alter or detract from those opinions.

14. Statements expressed in this report are made within the scope of my expertise, except where I rely on the technical advice, I have referred to in paragraph 5 of this report.
15. Unless otherwise identified within the body of my report, I have all the information necessary to assess the application within the scope of my expertise and am not aware of any gaps in the information or my knowledge.

D. EXECUTIVE SUMMARY

16. The key conclusions of my report include:
 - (a) The application for resource consents for the construction, operation and maintenance of the Ō2NL Project is comprehensive and supported by a range of technical information relating to potential and actual effects, the management of those effects through the effects hierarchy, including offsetting/compensation, and the statutory framework.
 - (b) The overall activity status for the Ō2NL Project when assessed against the relevant provisions of the One Plan, PNRP and the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (“NES-F”) is bundled as a non-complying activity.
 - (c) Some outstanding matters remain regarding flooding and hydrology, cultural matters, imposition of standards and management of effects through management plans, certainty around delivery of offsetting and natural character mitigation, and conditions for management of the activities and effects.
 - (d) With regard to section 104D of the RMA, the Ō2NL Project does not meet the first gateway test. However, once necessary information is provided and other identified outstanding matters are resolved, the Ō2NL Project, with the imposition of conditions as recommended by the Regional Council experts, could be generally consistent with the objectives and policies of the regional plans. Presently however, it is consistent with some

objectives and policies, and not others, and/or I am unable to reach a firm view due to the need for further information.

- (e) With suitable resolution of areas identified as requiring further work, and subject to recommended conditions being met, including the offset package implemented and monitored for success over the life of the consents, then the effects of the proposed activities could, in my view, be avoided, remedied, mitigated or offset/compensated. In those circumstances the sustainable management of natural and physical resources would be promoted in accordance with the purpose of the RMA

E. SCOPE OF REPORT

- 17. My report focuses only on planning issues.
- 18. As noted above, I have also reviewed and relied on the information provided by:
 - (a) The application and Assessment of Environmental Effects (“**AEE**”) dated 1 November 2022¹ which broadly seeks the following resource consents:

Horizons

- (i) land use consents in accordance with section 9(2) of the RMA and the Regional Plan for the Manawatū – Whanganui Region (“**One Plan**”) and the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (“**NES-F**”);
- (ii) land use consents in accordance with section 13 of the RMA and the One Plan and the NES-F;
- (iii) water permits in accordance with section 14 of the RMA and the One Plan and the NES-F;

¹ Comprising Volume I: Application Forms (Folder 1), Volume II: Assessment of effects on the environment (Folders 2, 3 & 4), Volume III: Drawings and plans (Folder 5); Volume IV: Technical Assessments (Folders 6 – 11); Volume V: Cultural Impact Assessments (Folder 12).

- (iv) discharge permits in accordance with section 15 of the RMA and the One Plan and the NES-F.

GWRC

- (i) land use consents in accordance with section 9 of the RMA and the Proposed Natural Resources Plan (“**PNRP**”) and the NES-F;
 - (ii) land use consents in accordance with section 13 of the RMA and the PNRP and the NES-F;
 - (iii) water permits in accordance with section 14 of the RMA and the PNRP and the NES-F;
 - (iv) discharge permits in accordance with section 15 of the RMA and the PNRP and the NES-F.
- (b) Response to request for further information under section 92 of the RMA, dated 17 January 2023 (the “**Section 92 Response**”).
 - (c) Letter from Waka Kotahi 07 March 2023, withdrawing part of the application as it relates to the taking of surface water from the core allocation from the Ōhau River.
 - (d) Additional information provided by Waka Kotahi dated 21 March 2023, as to refinement of approaches to the management of potential adverse effects and proposed changes to conditions.

F. BACKGROUND

- 19. On 2 November 2022, Horizons and GWRC received from Waka Kotahi a suite of resource consent applications for the construction, operation and maintenance of the Ō2NL Project. The applications were formally recorded as lodged on 9 November 2022 and accepted by the Regional Councils under section 88 of the RMA on 28 November 2022 (see Appendix 1). The application was accompanied by a request for the application to proceed directly to the Environment Court for determination, which was granted by Horizons and GWRC on 20 January 2023.

20. This report provides an analysis of the resource management issues for the Ō2NL Project, with a view to informing and assisting the Environment Court as part of the direct referral process. My assessment and recommendations are based on the information provided by Waka Kotahi, my review of the submissions and my reliance on the section 87F technical expert reports. For the benefit of the submitters, I record that my assessment and recommendations are not binding on the Environment Court.
21. A more detailed description of the history of the application, the proposed activities and the site is provided in sections F, G, H, I and J of this report.
22. The recommendations made, and conclusions reached in this report, may be revisited following mediation, any expert witness conferencing, and following review of evidence of the Applicant and submitters later in the process.

G. APPLICATION FOR RESOURCE CONSENTS

Notices of Requirement

23. Waka Kotahi, as part of this process, filed notices of requirements to the territorial authorities, Horowhenua District Council (“**HDC**”) and Kapiti Coast District Council (“**KCDC**”), for the Project on 9 November 2022. A section 198D report on behalf of the District Councils addresses the issues as to the NoRs.

H. REVIEW OF APPLICATION

24. The resource consents sought for the O2NL Project are in two groups. The first two groupings are the split between the Horizon’s resource consents (Table 1) and the GWRC resource consents (Table 2). Within each Regional Council group of consents there is a further split as between ‘construction’ and ‘implementation’. The first group of consents are required for the ‘construction’ phase of the Ō2NL Project for which a duration of 10 years is sought. The second group of consents are required for aspects of construction and the ongoing operation of the Ō2NL Project for which a duration of 35 years is sought by Waka Kotahi.

25. The consents and durations sought are as follows:

Table 1: MWRC Consents Sought - Construction

Construction Phase Activity	Consent Type	Duration
<p>A land use consent, a water permit and a discharge permit is sought pursuant to sections 9(2), 14 and 15 of the RMA and Rule 13-2 for large scale earthworks (including the ancillary diversion of water and the discharge of sediment to water) where the earthworks are not:</p> <ul style="list-style-type: none"> - in a rare, at risk or threatened habitat; - within 5m of the bed of a permanently flowing river; - within 5m of the bed of a river that is not permanently flowing and has a width greater than 1m; or - within 10m of a wetland identified in Schedule F. 	Controlled activity	10 years
<p>A land use consent, a water permit and a discharge permit is sought pursuant to sections 9(2), 13, 14 and 15 of the RMA and Rule 13-7 for land disturbance and vegetation clearance (including any ancillary disturbance of the bed of a river division of water and discharge of sediment or slash) that is not in a 'rare', 'at-risk' or 'threatened' habitat and is:</p> <ul style="list-style-type: none"> - within 5m of the bed of a permanently flowing river; - within 5m of the bed of a river that is not permanently flowing and has a width greater than 1m; or - within 10m of a wetland identified in Schedule F but outside of a rare, at risk or threatened habitat. 	Discretionary activity	10 years
<p>A land use consent is sought pursuant to sections 9(2) and 13 of the RMA and Rule 13-8 for large scale earthworks and vegetation clearance within an at-risk habitat.</p>	Discretionary activity	10 years
<p>A water permit is sought pursuant to section 14 of the RMA and Rule 13-8 for the diversion of water within an at-risk habitat.</p>	Discretionary activity	10 years
<p>A discharge permit is sought pursuant to section 15 of the RMA and Rule 13-8 for the discharge of water or contaminants to water or land within an at-risk habitat.</p>	Discretionary activity	10 years

Construction Phase Activity	Consent Type	Duration
A land use consent is sought pursuant to sections 9(2) and 13 of the RMA and Rule 13-9 for large scale earthworks and vegetation clearance within a 'rare' or 'threatened' habitat.	Non-complying activity	10 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule 13-9 for the discharge of water or contaminants to water or land within a 'rare' or 'threatened' habitat.	Non-complying activity	10 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule 14-30 for the discharge or placement of cleanfill.	Discretionary activity	10 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule 15-17 of the One Plan for the discharge of contaminants to air.	Discretionary activity	10 years
A water permit is sought pursuant to section 14 of the RMA and Rule 16-9 for the taking of surface water.	Discretionary activity	10 years
A water permit is sought pursuant to section 14 of the RMA and Rule 16-9 for the taking of water for construction related dewatering outside of an 'at-risk', 'rare' or 'threatened' habitat.	Discretionary activity	10 years
A land use consent, a water permit and a discharge permit is sought pursuant to sections 9(2), 13, 14 and 15 of the RMA and Rule 17-3 of the One Plan as a discretionary activity for the placement of a bridge over the Ōhau River and Waikawa Stream (and associated disturbance, diversion, deposition and discharges).	Discretionary activity	10 years
A land use consent, a water permit and a discharge permit is sought pursuant to sections 9(2), 13, 14 and 15 of the RMA and Rule 17-15 of the One Plan for the placement of a bridge over the Waiauti, Manakau and Kuku Streams (and associated disturbance, diversion, deposition and discharges).	Discretionary activity	10 years
A land use consent is sought pursuant to sections 9(1) of the RMA and Regulation 45 of the NES-F for vegetation clearance, earthworks and land disturbance within or near natural wetlands for	Discretionary activity	10 years

Construction Phase Activity	Consent Type	Duration
the purpose of constructing specified infrastructure.		

Construction and Operational Phase Activity	Consent Type	Duration
A construction and operational water permit is sought pursuant to section 14 of the RMA and Rule 13-8 as a discretionary activity for the diversion of water within an at-risk habitat	Discretionary activity	35 years
A construction and operational discharge permit is sought pursuant to section 15 of the RMA and Rule 13-8 as a discretionary activity for the discharge of water within an at-risk habitat.	Discretionary activity	35 years
A construction and operational water permit is sought pursuant to section 14 of the RMA and Rule 13-9 as a non-complying activity for the diversion of water within a 'rare' or 'threatened' habitat.	Non-complying activity	35 years
A construction and operational discharge permit is sought pursuant to section 15 of the RMA and Rule 13-9 as a non-complying activity for the discharge of water within a 'rare' or 'threatened' habitat.	Non-complying activity	35 years
An operational discharge permit is sought pursuant to section 15 of the RMA and Rule 14-25 of the One Plan as a discretionary activity for the discharge of treated stormwater to a reach of a surface water body or its bed within a Schedule B Value of Sites of Significance – Aquatic.	Discretionary activity	35 years
An operational water permit is sought pursuant to section 14 and Rule 16-9 of the One Plan as a discretionary activity for the taking of water for operational related dewatering outside of an 'at-risk', 'rare' or 'threatened' habitat.	Discretionary activity	35 years
A construction and operational water permit is sought pursuant to section 14 of the RMA and Rule 16-13 of the One Plan as a discretionary activity for the diversion of water outside of an 'at-risk', 'rare' or 'threatened' habitat.	Discretionary activity	35 years

Construction and Operational Phase Activity	Consent Type	Duration
A construction and operational land use consent is sought pursuant to section 13 of the RMA and Rule 17-23 of the One Plan as a discretionary activity for the placement of culverts (and associated disturbance, diversion, deposition and discharges)	Discretionary activity	35 years
A construction and operational water permit and a discharge permit is sought pursuant to sections 14 and 15 of the RMA and Regulation 45 of the NES-F as a discretionary activity the taking, use, damming, diversion, or discharge of water within or near natural wetlands for the purposes of constructing specified infrastructure.	Discretionary activity	35 years
A construction and operational land use consent is sought pursuant to section 13 and Regulation 57 of the NES-F as a discretionary activity for the reclamation of stream beds.	Discretionary activity	Unlimited
A construction and operational land use consent is sought pursuant to section 13 of the RMA and Regulation 71 of the NES-F as a discretionary activity for the placement, use, alteration, extension, or reconstruction of a culvert in, on, over, or under the bed of a river.	Discretionary activity	35 years

Table 2: GWRC Consents Sought

Construction Phase Activity	Consent Type	Duration
A discharge permit is sought pursuant to section 15 and Rule R42 for a discharge to air from the Ō2NL Project works during the construction phase.	Discretionary activity	10 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule R94 for the discharge of cleanfill to land and water.	Discretionary activity	10 years
A water permit is sought pursuant to section 14 and Rule K.R1 for the taking of surface water in the Kāpiti Whaitua.	Restricted discretionary activity	10 years
A land use consent is sought pursuant to sections 9(1) of the RMA and Regulation 45 of the NES-F for	Discretionary activity	10 years

Construction Phase Activity	Consent Type	Duration
vegetation clearance, earthworks and land disturbance within or near natural wetlands for the purpose of constructing specified infrastructure.		
A land use consent and a discharge permit is sought pursuant to sections 9(2) and 15 of the RMA and Rule R107 for earthworks and the associated discharge of sediment.	Discretionary activity	10 years
A land use consent and a discharge permit is sought pursuant to sections 13 and 15 of the RMA and Rule R145 of the PNRP as a discretionary activity for the placement of culverts (but not reclamation or diversion of water)	Discretionary activity	10 years

Operational Phase Activity	Consent Type	Duration
A discharge permit is sought pursuant to section 15 of the RMA and Rule R50 of the PNRP as a discretionary activity for the discharge of treated stormwater from the Ō2NL Project.	Restricted Discretionary	35 years
A land use consent, a water permit and a discharge consent is sought pursuant to sections 9(2), 14 and 15 of the RMA and Rule R118 of the PNRP as a non-complying activity for the works within, and reclamation of, a wetland.	Non-complying activity	10 years (water permit and discharge permit) Unlimited (land use consent)
A land use consent is sought pursuant to sections 13 of the RMA and Rule R143 of the PNRP the reclamation of streams associated with the piping of the streams.	Non-complying activity	Unlimited
A water permit is sought pursuant to section 14 of the RMA and Rule R147 of the PNRP for diversion of streams.	Discretionary activity	35 years
A water permit is sought pursuant to section 14 of the RMA and Rule R160 of the PNRP for dewatering.	Discretionary activity	35 years

Operational Phase Activity	Consent Type	Duration
A discharge permit is sought pursuant to section 15 of the RMA and Rule R160 of the PNRP for dewatering.	Discretionary activity	35 years
A water permit and a discharge permit is sought pursuant to sections 14 and 15 of the RMA and Regulation 45 of the NES-F the taking, use, damming, diversion, or discharge of water within or near natural wetlands for the purposes of constructing specified infrastructure.	Discretionary activity	35 years
A land use consent is sought pursuant to section 13 and Regulation 57 of the NES-F of the reclamation of stream beds.	Discretionary activity	Unlimited
A land use consent is sought pursuant to section 13 of the RMA and Regulation 71 of the NES-F for the placement, use, alteration, extension, or reconstruction of a culvert in, on, over, or under the bed of a river.	Discretionary activity	35 years

I. FURTHER INFORMATION AND INFORMATION GAPS

26. Further information was requested in the form of a joint request by all the Councils under section 92(1) of the RMA with regard to the applications on 9 December 2022. A copy of the request is included in Appendix 13. The Regional Council component of the further information request related to water takes, terrestrial ecology and offsetting, water quality, water sensitive design, hydrogeology and groundwater, erosion and sediment control, air quality, natural character, hydrology and flooding and contaminated land matters.
27. Horizons and GWRC received a detailed response to these matters on 23 December 2022, with the completed to both District and Regional matters received on 17 January 2023. A copy of Waka Kotahi's response to the Regional Council request is included in Appendix 14.
28. In response to advice from Horizons that the Ōhau River core allocation was fully allocated, Waka Kotahi responded by way of a letter dated 7 March 2023, withdrawing part of the application as it relates to the taking of surface from the core allocation from the Ōhau River. Further, the letter clarified that the application for the proposed water take and use from the Ōhau River is proposed for when the river is at or above median flows by way of a supplementary take, with the AEE set out in the application. A copy of Waka Kotahi's letter is included in Appendix 15.
29. Additional information was provided by Waka Kotahi on refinement of approaches to the management of potential adverse effects and proposed changes to conditions, via correspondence, dated 21 March 2023. A copy of Waka Kotahi's letter to the combined Council's is included in Appendix 16. The letter included amendments to proposed conditions, and documents relating to the proposed abstractions of water from the Waitohu Stream and Koputaroa Stream.

J. NOTIFICATION / SUBMISSIONS / WRITTEN APPROVALS

General position of submission	Horizons Total	GWRC Total
Oppose	35	26
Support	33	30
Neutral	16	16
Not specified	5	17
Total	89	89

30. The applications were publicly notified on 24 January 2023, with affected/interested parties served notice of the application on 20 January 2023. The submission period closed on 28 February 2023, with a total of eighty-nine (89) submissions received.
31. There were no late submissions.
32. The general position of the submissions are tabled below:
- (a) A full list of submitters is provided in Appendix 17. I note that submission number #80 is a collective submission from ten (10) individual hapu of Ngāti Raukawa ki te Tonga. In addition, submissions #81 and #83-#90, are individual submissions from nine (9) of the ten (10) hapu. As such there is no submission #82, for the purposes of calculating the total number of submissions. The submissions have been summarised in Appendix 18. I record that this summary of the submissions is a combination of Regional and District Council matters. However, in my report, I attempt to deal only with the Regional Council matters. Ms Helen Anderson addresses the District Council matters in her report prepared under section 198D of the RMA.
- (b) At the time of preparing this section 87F report, forty-six (46) submitters wish to be heard in relation to their submission, and

twenty-one (21) submitters do not wish to be heard. Twenty-two (22) submitters did not specify one way or the other.

33. I have addressed the matters raised in the submissions throughout my report where those concerns are relevant to the environmental effect or statutory document being assessed. Supporting submissions have also been accounted for in my assessment. Section 87F experts for Horizons and GWRC have also reviewed the relevant submissions, as required, and incorporated comments into their assessments.

K. LOCATION – EXISTING ENVIRONMENT

34. The Applicant has provided a detailed description of the existing environment in the AEE, both human and natural environments, including the topography and landscape, landforms and geology, water catchments and surface water quality, groundwater, freshwater and terrestrial ecology, cultural, heritage and archaeology, transport, noise, land uses, and social make-up of the proposed route and surrounding area.²
35. A plan below shows the locality of the project.

² Volume II (Folder 2 of 12) Assessment of Effects on the Environment, Part C, Pages 60 – 77.



L. PROPOSED ACTIVITY

- 36. A thorough description of the proposal is set out in the AEE.³
- 37. The Ō2NL Project is at the northern most section of the Wellington Northern Corridor, and is proposed to provide the final section, being a

³ Volume II (Folder 2 of 12) Assessment of Effects on the Environment, Part C, Pages 60 – 77.

4-lane expressway of an extension connecting to the Peka Peka to Ōtaki expressway.

38. The applications relate to the construction, operation, and maintenance of 24km of state highway and shared use path (SUP) and associated infrastructure, between Taylors Road (to the north of Ōtaki) and State Highway 1 north of Levin.
39. The southern portion of the alignment for a distance of appropriately 3.9 km is within the Greater Wellington Region, while the remaining northern portion of the alignment, being 20.1km, is in the Horizons Region.
40. The new highway will be a median separated carriage way with two lanes in each direction over the majority of the route. The Ō2NL Project also includes a SUP for cyclists and pedestrians, as well as a number of new bridges.
41. A summary list of the features of the Ō2NL Project is set out below:
 - (a) a grade separated diamond interchange at Tararua Road, providing access into Levin;
 - (b) two dual lane roundabouts located where Ō2NL crosses State Highway 57 (SH57) and where it connects with the current SH1 at Heatherlea East Road, north of Levin;
 - (c) four lane bridges over the Waiauti, Waikawa and Kuku Streams, the Ōhau River and the North Island Main Trunk (NIMT) rail line north of Levin;
 - (d) a half interchange with southbound ramps near Taylors Road and the new PP2Ō expressway to provide access from the current SH1 for traffic heading south from Manakau or heading north from Wellington, as well as providing an alternate access to Ōtaki.
 - (e) local road underpasses at South Manakau Road and Sorenson Road to retain local connections;

- (f) local road overpasses to provide continued local road connectivity at Manakau Heights Drive, North Manakau Road, Kuku East Road, Muhunoa East Road, Tararua Road (as part of the interchange), and Queen Street East;
- (g) new local roads at Kuku East Road and Manakau Heights Road to provide access to properties located to the east of the Ō2NL Project;
- (h) local road reconnections connecting:
 - McLeavey Road to Arapaepae South Road on the west side of the Ō2NL Project;
 - Arapaepae South Road, Kimberley Road and Tararua Road on the east side of the Ō2NL Project;
 - Waihou Road to McDonald Road to Arapaepae Road/SH57; and
 - Koputaroa Road to Heatherlea East Road and providing access to the new northern roundabout.
- (i) the relocation of, and improvement of, the Tararua Road and current SH1 intersection, including the introduction of traffic signals and a crossing of the NIMT railway line;
- (j) road lighting at conflict points, that is, where traffic can enter or exit the highway;
- (k) signs, including gantries, as required;
- (l) median and edge barriers that are typically wire rope safety barriers with alternative barrier types used in some locations, such as bridges that require rigid barriers or for the reduction of road traffic noise;
- (m) stormwater treatment wetlands and ponds, stormwater swales, drains and sediment traps;

- (n) culverts to reconnect streams crossed by the Ō2NL Project and stream diversions to recreate and reconnect streams;
 - (o) a separated (typically) three metre wide SUP, for walking and cycling along the entire length of the new highway (but deviating away from being alongside the Ō2NL Project around Pukehou (near Ōtaki)) that will link into shared path facilities that are part of the PP2Ō expressway (and further afield to the Mackays to Peka Peka expressway SUP);
 - (p) spoil sites at various locations along the length of the Project; and
 - (q) five sites for the supply of bulk fill /earth material located near Waikawa Stream, the Ōhau River and south of Heatherlea East Road.
42. An offset/compensation package of planting, fencing and pest control for natural, terrestrial and freshwater purposes is also proposed primarily outside the NOR alignment boundaries.⁴ Natural character planting has also been proposed.
43. In addition, there are number of construction activities including:
- (a) Earthworks approximately 4,000,000m³ to 5,000,000m³ of excavated (cut) material (excluding topsoil) with approximately 3,000,000m³ to 4,000,000m³ of this cut material placed as structural fill for embankments along the proposed Ō2NL route.
 - (b) Material supply sites for a net cut fill deficit of approximately 2,500,000m³ from either side of the Ōhau River and Waikawa Stream, with all material supply sites within the NoR boundary.
 - (c) Water takes for construction purposes from the Ōhau River (as supplementary take), and Koputaroa, Waikawa, Manakau and Waiauti Streams (all within Horizons jurisdiction), and the

⁴ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part C – Description of Project, Section 14.4.9, Page 76 and Volume III (Folder 5 of 12) – Drawings and plans, 08 Planting.

Waitohu Stream (within GWRC jurisdiction) for a maximum combined volume of 3,900m³/day across the alignment.

(d) Water storage ponds with a capacity of 80,352m³.

M. STATUTORY CONSIDERATIONS

44. Section 87F of the RMA outlines that if a consent authority grants a request for direct referral it must prepare a report on the application. The report must:

(a) address issues that are set out in sections 104 to 112 of the RMA to the extent that they are relevant to the application; and

(b) suggest conditions that it considers should be imposed if the Environment Court grants the application; and

(c) provide a summary of submissions received.

45. There are no written approvals of persons/parties such that effects on those persons/parties must be disregarded in terms of section 104(3)(a) of the RMA.

46. The application is to be assessed overall as a non-complying activity under the One Plan and the PNRP. When considering an application for a non-complying activity, the consent authority must have regard to Part 2 of the RMA, and sections 104, 104D, and where relevant sections 105, 107, 108 and 108AA of the RMA.

Section 104

47. Section 104 of the RMA sets out the matters a consent authority shall have regard to in considering an application for resource consent and any submissions received. The section 104 matters that I consider to be of relevance to the applications include:

(a) **Actual and potential environmental effects**⁵ - In the following paragraphs, I consider the AEE and the technical expert reports before providing my overall assessment of the actual and

⁵ Section 104(1)(a), RMA.

potential effects of the activities. This assessment is given in paragraphs 50-152 of this report.

- (b) **National Environmental Standards (NES)**⁶ - The NES-F, the NES for Air Quality 2004, NES for Sources of Drinking Water 2007, and the NES for Assessing and Managing Contaminants in Soil to Protect Human Health 2011, are relevant to this application. I concur with the statement in the application that the NES for Plantation Forestry 2018, the NES for Telecommunications Facilities Regulations 2016, the NES for Electricity Transmission Activities Regulations 2009, the NES for Marine Aquaculture and the NES for Storing Tyres Outdoors are not relevant to the Ō2NL Project.⁷ I discuss the relevant NES in paragraphs 154-170. I conclude that the proposed activities are consistent with the relevant NES.
- (c) **Other regulations**⁸ - There are no other regulations of relevance to the suite of applications relating to the Project.
- (d) **Relevant National Policy Statements (NPS)**⁹ - The NPS for Freshwater Management 2020 (Amendment No.1), the NPS on Urban Development Capacity 2020 (amended May 2022) and the NPS Highly Productive Land 2022 are relevant to this application. I discuss the relevant NPSs in paragraphs 171-185 of this report and conclude that the proposed activities are consistent with those NPS (subject to Mr Brown's effects assessment as recorded below). I concur with the statement in the application that the NPS for Renewable Electricity Generation 2011 and the NPS on Electricity Transmission 2008 are not relevant to this application.¹⁰

⁶ Section 104(1)(b)(i).

⁷ Volume II - Assessment of Effects on the Environment, Part I – Statutory Assessment, Section 64.5, Page 327.

⁸ Section 104(1)(b)(ii).

⁹ Section 104(1)(b)(iii).

¹⁰ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I – Statutory Assessment, Section 63.4, Page 325.

- (e) **New Zealand Coastal Policy Statement¹¹** - I concur with the statement in the application that the New Zealand Coastal Policy Statement is not relevant to this application.¹²
- (f) **Relevant Regional Policy Statements (RPS)¹³** - The relevant objectives and policies of the One Plan RPS and the RPS for the Wellington Region ("**Wellington RPS**") are discussed in paragraphs 186 to 213 and 241 to 263 of this report, respectively.
- (g) **Relevant Regional Plans¹⁴** - The relevant objectives, policies and rules of the One Plan and the PNRP are discussed from paragraphs 214 to 239 and 264 to 292 in this report.
- (h) **Other Matters Horizons and GWRC Consider Relevant¹⁵** - These matters are discussed in paragraph 301 of this report.

Matters relating to the grant of discharge permits

- 48. Section 105 of the RMA lists additional matters that a consent authority must have regard to when considering applications for discharge or coastal permits to do something that would contravene section 15 of the RMA. These matters are addressed in paragraphs 313 to 318 of this report.
- 49. Section 107(1) of the RMA places restrictions on the grant of resource consents for the discharge of contaminants into water if they cause certain adverse effects in receiving waters after reasonable mixing. However, there are a limited range of exceptions provided in section 107(2) to this prohibition. These section 107 matters are also discussed in paragraphs 319 to 323 of this report.

¹¹ Section 104(1)(b)(iv).

¹² Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I – Statutory Assessment, Section 63.4, Page 325.

¹³ Section 104(1)(b)(v).

¹⁴ Section 104(1)(b)(vi).

¹⁵ Section 104(1)(c).

N. ACTUAL AND POTENTIAL EFFECTS ON THE ENVIRONMENT

50. The assessment of environmental effects below considers the key effects arising from the application that are within the jurisdiction of Horizons and GWRC. These effects are:

- (a) Effects on air quality;
- (b) Effects on hydrology, operational stormwater (quantity) and flooding;
- (c) Effects on hydrogeology and groundwater;
- (d) Ecological and freshwater water quality effects;
- (e) Operational stormwater (quality) effects;
- (f) Land disturbance/earthworks/sedimentation effects;
- (g) Effects on terrestrial ecology and wetland ecosystems;
- (h) Effects on natural character;
- (i) Effects of surface water takes;
- (j) Contaminated land potential effects;
- (k) Effects on tangata whenua and cultural values; and
- (l) Positive effects.

Air quality

51. There is the potential for effects on air quality from the construction and operation of the Project, primarily in the form of dust. The Applicant has addressed these issues in the AEE¹⁶ and Technical Assessment C.¹⁷ Submitters raised issues regarding dust effects and potential

¹⁶ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 43, Pages 232-238.

¹⁷ Volume IV (Folder 7 of 12) – Technical Assessment C. Air Quality.

contamination of roof water supplies.¹⁸ Mr Peter Stacey has assessed these air quality effects issues on behalf of Horizons and GWRC.

52. Ms Stacey considers that the air quality assessment included as part of the application is comprehensive in its assessment of the potential effects from the project, including effects of construction (primarily dust) discharges from vehicles once the project is operational, as well as the receiving environment and identification of sensitive receptors.¹⁹
53. In assessing the effects from construction of the Project, Mr Stacey's assessment notes general agreement with the mitigation measures proposed by Mr Curtis, with the exception of:
- (a) Dust monitoring – rather than only monitoring in relation to complaints, Mr Stacey considers that the dust monitoring should be continuous;
 - (b) The need for more specific conditions on the protection of drinking water for properties relying on roof-collected water; and
 - (c) Additional conditions addressing proposed measures in response to circumstances where dust has created a nuisance effect.²⁰
54. In relation to residual effects Mr Stacey considered that some matters included within the Construction Air Quality Management Plan sets limits and are effectively conditions of consent, including the addition of bottom line triggers to address sensitive receptors located within 50m of the proposed designation boundary.²¹ I note that Mr Stacey considers that:²²

For properties within 50 m of Project areas, even with the use of these dust control measures there is the potential that residual dust effects at these properties will be such that residents are likely to notice increased dust levels and potentially be annoyed. Without understanding the proposed dust control measures for the construction phase of the Ō2NL

¹⁸ Submission No.s 1, 2, 8, 9, 10, 11, 22, 23, 25, 29, 36, 40, 47, 48, 49, 60, 70, and 73.

¹⁹ Section 87F and s198D Report – P Stacey – Air Quality, para 28 and 31-35.

²⁰ Section 87F and s198D Report – P Stacey – Air Quality, para 59-65.

²¹ Section 87F and s198D Report – P Stacey – Air Quality, para 66-70.

²² Section 87F and s198D Report – P Stacey – Air Quality.

Project it is not possible to conclude that implementation of the Dust Management Plan will effectively mitigate the potential dust effects on the nearby properties.

55. Mr Stacey has relied on the technical advice of Mr Lambie when considering the effects of dust on plants.²³ Mr Lambie is of the view that there are no ecological areas particularly sensitive to dust deposition and if effects are managed to protect human health, then the effects on plants are likely to be minor.
56. In conclusion, with the recommended amendments to the conditions as to construction effects,²⁴ Mr Stacey considers that this would ensure an appropriate level of air quality across all phases of the Ō2NL Project.²⁵
57. For the implementation phase of the project Mr Stacey notes that the concentration of air pollutants are predicted to be below human health air quality assessment criteria and on this basis, agreed with the Applicant that migration measures are unnecessary.
58. I rely on Mr Stacey's report and have recommended conditions which, if imposed on the consents, will support the view that the potential dust effects on nearby properties can be appropriately mitigated.

Hydrology and Flooding (Stormwater Quantity) Effects

59. Fourteen (14) submissions raised the issue of hydrology, drainage and flood effects.²⁶ The application addresses hydrology and flooding effects in the main AEE²⁷ and in the technical reports.²⁸
60. Mr Peter Kinley, civil engineer at ARUP, has assessed the application from a hydrology and flood risk perspective.
61. Mr Kinley is in general agreement with Waka Kotahi's approach to hydrological modelling, the general approach to hydraulic modelling,

²³ Section 87 F Report – J Lambie – Terrestrial Ecology, para 63-65.

²⁴ Section 87F and s198D Report – P Stacey – Air Quality, paras 91-105.

²⁵ Section 87F and s198D Report – P Stacey – Air Quality, para 20.

²⁶ Submission No.s 3, 10, 11, 20, 22, 49, 50, 52, 53, 57, 68, 73, 79.

²⁷ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 47, Pages 262 – 267.

²⁸ Volume IV (Folder 8 of 12) – Technical Assessment continued, F Hydrology and Flooding 7.

including the comparison of baseline and “with-road” scenarios, and the selection of climate change scenarios to estimate the impact of climate change.²⁹

62. However, there are a number of matters that concern Mr Kinley,³⁰ including:

- (a) The conclusion that the Ō2NL Project will have effects that are less than minor is not supported by technical information lodged within the application.
- (b) The hydrology and flooding assessments prepared for the applications show the design solution will have adverse effects, and Mr Kinley cannot reach the view that the effects are less than minor. Mr Kinley considers that the criteria/threshold to determine whether a change in flood level is “less than minor” is too high and there is insufficient information within the application to be confident of the existence of a design solution that will ensure there are no adverse effects on the environment.
- (c) While the application reporting is focussed on changes in depth as the primary potential effect of the Ō2NL Project, there is insufficient detail in Mr Kinley’s view provided on velocity, area of flooding, duration of flooding, scour, flood hazard (the product of velocity and depth) and of the flooding at buildings.
- (d) Noting the absence of an assessment of the 0.5% AEP storm event, with an allowance for the effects of climate change, Mr Kinley considers that the effects of the works that Horizons seeks to understand in its One Plan are unquantified.
- (e) In relation to the selection of the 10% AEP storm event as the smallest storm event used in the assessment means that any effects that may occur frequently and be recognisable and understandable by affected parties, for example a 50% AEP storm event or a 20% AEP storm event, are not known.

²⁹ Section 87 F Report – P Kinley – Hydrology and Flooding, para 14.

³⁰ Section 87 F Report – P Kinley – Hydrology and Flooding, para 15.

- (f) In Mr Kinley's view the threshold values used by Waka Kotahi to describe whether an effect is significant are inconsistent with current practice.
 - (g) The absence of a complete assessment of freeboard means that it is not possible for Mr Kinley to confirm whether the proposed design is compliant with Waka Kotahi's own requirements.
 - (h) The approach used to assess the effects of the proposed scour protection is high level and as a consequence, Mr Kinley considers the effects of the works on flood levels are not quantified.
 - (i) Mr Kinley considers the assessment of the effects of the works on the flooding of buildings is incomplete and the assessment of the effects of the works on the duration of flooding and flood hazard is cursory.
63. In conclusion, Mr Kinley does not agree that the proposed works will have a less than minor effect on hydrology and flooding due to a combination of incomplete analysis. He has a low level of confidence in the conclusions reached by Waka Kotahi, and is of the opinion that the flooding impacts of the proposed design are likely to be more than minor.
64. Based on the assessment of Mr Kinley, and the gaps he has identified in the hydrology and flooding technical assessments, I am not able to reach a firm conclusion as to potential effects of hydrology and flooding. As it stands, I understand there is presently insufficient information to support a conclusion that the effects are less than minor.

Hydrology and Groundwater Effects

65. A number of submissions raised the issue of groundwater effects particularly in relation to effects on existing bores.³¹
66. Mr Jon Williamson, a hydrologist at Williamson Water & Land Advisory, has assessed the application from a hydrology and groundwater perspective. Mr Williamson agrees with the hydrological overview of the

³¹ Submission No.s 8, 56, 71, 75.

project set out in the application, and considers that the information provided generally considers all the relevant effects of the proposal.³² Mr Williamson is of the view that the use of management plans, certified by the Regional Councils, coupled with monitoring and reporting requirements, will ensure the effects on groundwater can be appropriately managed during construction and operation of the Ō2NL Project.³³ Conditions have been suggested to reflect this position.

67. As to areas with the greatest potential hydrological impact Mr Williamson addresses the following;

(a) In relation to cuts below the groundwater table resulting in permanent dewatering in areas adjacent to natural wetlands (e.g. road cuts and gravel borrow areas) there is concern that the quantification on the reduction in hillslope seepage rate in comparison to the natural flow to the wetland was not provided. However, from discussions with Dr. McConchie (hydrologist for the Transport Agency) Mr Williamson understands that any wetlands within close proximity to dewatering with potential effects that cannot be considered 'less than minor', have been treated as lost and compensated for within the offsetting package. Mr Williamson also refers in this regard to the s87F report of Mr James Lambie for Horizons and GWRC.³⁴

(b) Relying on the further information provided by Waka Kotahi which indicates the highway is "*...now essentially 'at grade' and the maximum groundwater levels at key locations has been assumed to be at the ground surface*"³⁵ Mr Williamson understands that the latest road alignment has no excavations, and therefore there will be no dewatering effects. Mr Williamson records that the occurrence of excavation below the groundwater

³² Section 87F Report – Jon Williamson – Hydrology and Groundwater; paras 21 -25.

³³ Section 87F Report – Jon Williamson – Hydrology and Groundwater; Para 18.

³⁴ Section 87F Report – Jon Williamson – Hydrology and Groundwater; Paras 30-34.

³⁵ Waka Kotahi, 2022a. Ōtaki to north of Levin Highway Project – Response to request for additional information pursuant to section 92 of the Resource Management Act 1991. Letter dated 22 December 2022. Item 64.

table would mean that effects would need to be managed through conditions of consent (RGW1 to RGW3).³⁶

- (c) As to the dewatering required to install Culvert 4 and Culvert 11. The timing of installation of the culverts (likely during summer when groundwater is low) means the need for and extent of any dewatering will be either avoided or minimised. Mr Williamson also understands that any dewatering is intended only for installation of the culverts and will be of short duration. On this basis, Mr Williamson is comfortable with the proposed dewatering measures and considers that the draft conditions of consent relevant to groundwater (RGW1 to RGW3) address these matters. This includes RGW1 which provides for the taking of groundwater for the purpose of dewatering to continue only for the time required to carry out the construction activities and when groundwater is low. However, Mr Williamson considers a more definitive period of time for dewatering based on typical construction time (including weather contingencies) for the scale of culverts within the Project should be provided.³⁷
- (d) There is an issue of potentially high groundwater tables east of Levin in areas of proposed stormwater soakage facilities and Mr Williamson is concerned that prolonged high groundwater tables due to frequent succession of storm events will prevent emptying of the devices and also promote groundwater mounding on adjacent low-lying areas. While the application does not provide the necessary detail/information for an informed assessment to be made of this issue and the related risk to the environment, Mr Williamson considers that the matter can be resolved through the detailed design process. For this reason, Mr Williamson recommends that a Stormwater Soakage Device Management Plan is developed for the project, and is required to undergo technical certification at least forty (40) working days prior to the

³⁶ Section 87F Report – Jon Williamson – Hyrdology and Groundwater, para 35-37.

³⁷ Section 87F Report – Jon Williamson – Hydrology and Groundwater, para 38-41.

commencement of construction activities by a stormwater engineer and a hydrogeologist.³⁸

- (e) Mr Williamson agrees that construction effects on groundwater quality can be avoided by ensuring that all runoff from the construction and adjacent areas is appropriately managed.³⁹
- (f) Mr Williamson considers that there will be no issues arising from the Ō2NL Project with community groundwater supply bores.⁴⁰
- (g) Mr Williamson notes the lack of design detail available for the spoil and gravel borrow sites, and how this has meant he cannot be overly definitive about potential groundwater and other effects associated with these sites. Mr Williamson is of the view that there needs to be further information provided on the spoil and borrow sites, and their effects, and/or at the very least, a detailed Council certification process with regard to design detail and proposed monitoring will be required via consent conditions.⁴¹
- (h) Mr Williamson also considers the potential for groundwater impacts due to reduction in stream baseflows due to surface water abstractions from streams and rivers.⁴²
- (i) Addressing the individual bores raised by submitters, based on his assessment, Mr Williamson recommends conditions as to the verification of bore integrity and potential supplementary supply during the construction period, in appropriate cases.⁴³

68. In conclusion, Mr Williamson states, *“In my opinion, if the O2NL Project proceeds in general accordance with the design and management plans, along with the strengthened conditions, the Ō2NL Project should result in hydrogeological neutrality with respect to groundwater quantity and quality.”*⁴⁴

³⁸ Section 87F Report – Jon Williamson – Hydrology and Groundwater, para 42-50.

³⁹ Section 87F Report – Jon Williamson – Hydrology and Groundwater, para 51-52.

⁴⁰ Section 87F Report – Jon Williamson – Hydrology and Groundwater, para 56-62.

⁴¹ Section 87F Report – Jon Williamson – Hydrology and Groundwater, para 63-66.

⁴² Section 87F Report – Jon Williamson – Hydrology and Groundwater, para 67-81.

⁴³ Section 87F Report – Jon Williamson – Hydrology and Groundwater, para 82-92.

⁴⁴ Section 87F Report – Jon Williamson – Hydrology and Groundwater, para 96.

69. Based on Mr Williamson's report and recommended conditions, I consider the groundwater effects of the proposal will be appropriately managed.

Freshwater – effects on water quality and ecology

70. The effects of the proposed activities on surface water quality and freshwater ecology across the Ō2NL Project catchments and receiving waters are identified in the AEE,⁴⁵ and through the Section 92 Response. Potential effects on freshwater water quality and ecology were raised in a number of submissions.⁴⁶
71. Mr Brown has undertaken an assessment of the proposal in regard to surface water quality effects. Mr Brown's report sets out an overview of the surface waters and associated values around the proposed alignment. Mr Brown identifies that the Ō2NL Project falls within the following water management zones identified in the One Plan, being the Waikawa (West_9), Ōhau (Ōhau), Hōkio (Hoki), and the Manawatū (Mana) and the following water management sub-zones Manakau (West_9b), Waikawa (West_9a), Lower Ōhau (Ōhau_1b), Lake Horowhenua (Hoki_1a), and Koputaroa (Mana_13e). Further, for GWRC PNRP, the Ō2NL Project falls within the Waitohu, as set out in Schedule F F1 Rivers and Lakes with Significant and Indigenous Ecosystems, F1b – Inanga Spawning, Schedule H1 Contact and Customary Use and Schedule 1 Trout Fishery and Spawning.
72. Mr Brown agrees with Waka Kotahi's assessment as to the overall ecological values as follows:
- (a) High – Ōhau and Waikawa Rivers;
 - (b) Moderate – Kuku Stream, Manakau Stream, Waiauti Stream, Streams 39, 39.1, 29, 27.1, 19, 17, and 18;
 - (c) Low – all other permanently flowing streams.

⁴⁵ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of environmental effects, Section 51, Pages 280 – 285 and Volume IV (Folder 11 of 12) – Technical Assessment K.

⁴⁶ Submission No.s 20, 59, 62, 74.

73. Mr Brown assesses of number of effects:

- (a) Light pollution – Mr Brown notes the proposed planting along streams proposed to mitigate this effect, however, is of the view that the requirement is not clearly set out in the conditions and recommends a standalone condition with a distance of upstream and downstream of culvert inlet and outlet to be 100m.⁴⁷
- (b) Sedimentation and Standards – Noting that Waka Kotahi has assessed modelled additional sediment at both the proposed works area scale and at a wider catchment scale, Mr Brown sets out the instream effects of sediment and records that catchments B (Waitohu), catchment C (Waitohu, also downstream is the Forest lakes), and Catchment I (Mangahuia) are the most sensitive from a water quality and freshwater ecology perspective. Mr Brown is of the view that the effects of sedimentation within the receiving environment needs to be considered wider than at the reach scale, and further, does not necessarily agree that effects of sedimentation are short term. Mr Brown notes that many waterways are already not meeting standards within the regional plans (clarity, for example). Even if they were assumed to be short-term, Mr Brown is of the view that those effects on the instream values can still be significant. Mr Brown considers that the volumes/concentrations of sediment that enter waterways and catchments should be limited through enforceable standards for end of pipe concentrations.⁴⁸ Further, Mr Brown considers that those triggers/standards need to be set relative to the sensitivity of the catchment, and should be backed up by additional monitoring.⁴⁹ A suite of standards have been recommended within Mr Brown's report reflecting information contained within the analysis of the catchment and sub-catchments in the application.⁵⁰

⁴⁷ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, Paras 37 – 41.

⁴⁸ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 42-57

⁴⁹ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 42-67

⁵⁰ Section 87F Report – Logan Brown– Water Quality and Aquatic Ecology, para 68-69.

- (c) Discharge to Otepua-Paruāku (O-te-pua) Wetland at the southern end of the alignment is the O-te-pua Wetland, which contains a lagoon system. Mr Brown notes that Stormwater pond 17 is intended to discharge into the system and that there is a modelled increase in sediment resulting from the proposed works (with sediment and nutrient likely to become trapped within the lagoon and accumulate overtime). On the assumption that the lagoon is in a degraded state, Mr Brown's view is that the application does not provide the information to be able to assess the effects on lakes (which includes lagoons) as required by the NPS-FM as to attribute states under the NoF.⁵¹
- (d) Fish Recovery – Waka Kotahi proposes to undertake fish removal/recovery to minimise the effects on aquatic species, and while Mr Brown supports the intent of the proposed fish recovery protocols, he has recommended a number of amendments to the conditions to ensure fish removal and or recovery is delivered in accordance with the intent of the application.⁵²
- (e) Water contamination from construction activities. Mr Brown agrees with Waka Kotahi's assessment of these effects, noting, however, the importance of management plans (and related recommendations in Technical Assessment K) in managing these effects.⁵³
- (f) Water takes, core allocation, minimum flows and supplementary takes. Noting the significant flow loss and regain in reaches of the Ōhau River, Waikawa, and Waitohu Streams, Mr Brown records his concern that ceasing takes at minimum flow will not always necessarily protect the values of the waterbodies. Considering the section 87F reports of Mr Thompson and Ms Stout and recognising the linkages between flow monitoring and actual abstraction points, Mr Brown agrees with the recommendations by Mr Thompson and Ms Stout. Mr Brown also identifies that, regardless of the take type, an important

⁵¹ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 77-80

⁵² Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 81.

⁵³ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 82-83

mechanism in managing the effects is to limit the rate of take from the waterway. Mr Brown therefore agrees that no more than 10% of the actual flow should be abstracted at any one time, and the abstraction rates should be scaled depending on the actual flow at the time. Mr Brown also agrees with recommendations of Ms Stout and Mr Thompson regarding trigger flows for the abstraction sites, so as to reduce potential effects.⁵⁴

- (g) Operational Stormwater Discharges. Having regard to the concept design for the stormwater management system, and the strong reliance on treatment to manage instream effects and to result in an overall improvement in water quality within the catchments, Mr Brown considers that representative monitoring of the efficiency of contaminant removal is warranted.⁵⁵ Mr Brown recommends that the monitoring occur in catchments that are identified as potentially higher risk from stormwater.⁵⁶
- (h) Fish passage – Mr Brown agrees with the approach to fish passage for the Ō2NL Project, recommending additional conditions, to provide for the “stream stimulation” designs as standard, as per the application.⁵⁷ Mr Brown records that the proposed stream simulation approach will equate to “no effect” situation for some bridge sites, a “net gain” for some streams, and a “very low” level of effect for all other waterways.⁵⁸
- (i) In relation to stream habitat loss offsetting, Mr Brown considers that the Stream Ecological Valuation (“SEV”) used by Waka Kotahi is the appropriate tool, and he agrees that the offsetting principles have been complied with. Further, Mr Brown considers that offsetting of the residual effects arising from reclamations has been undertaken in a manner consistent with the regional planning frameworks, including Schedules G1 and G2 of the

⁵⁴ Section 87F Report – Logan Brown– Water Quality and Aquatic Ecology, para 84-108,

⁵⁵ Section 87F Report – Logan Brown– Water Quality and Aquatic Ecology, para 109-111,

⁵⁶ Section 87F Report – Logan Brown– Water Quality and Aquatic Ecology, para 113.

⁵⁷ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 121-124.

⁵⁸ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 123.

PNRP. In order to deliver on the offsetting proposal (with sufficient certainty) Mr Brown has recommended the imposition of conditions to address a range of matters, including the width of riparian planting, pest plant control, the width of created stream channel, and the permanence offsetting.⁵⁹ Mr Brown is concerned to ensure that what is predicted to occur at the offset site is what will happen, and that what is proposed is an actual improvement (including a requirement for a feedback loop). In Mr Brown's opinion the outcomes of the proposed offset need to be secured for the length of time the effect exists for and preferably in perpetuity in order to meet the offsetting requirement of permanence.⁶⁰ Mr Brown has made recommendations for conditions of consent in this regard.

74. I rely on Mr Brown's report, in reaching the view that the proposal will have adverse effects on the values of those waterways affected by the proposal. While the effects of stream habitat loss cannot be fully avoided, remedied or mitigated, it is my view that, with the conditions recommended by Mr Brown, the actual and potential effects on water quality and ecology can be suitably managed. I emphasise, however, that robust standards, in-stream monitoring, and a requirement to respond on the identification of adverse effects are relied on in reaching this view.

Operational Stormwater Quality

75. Mr Stuart Farrant, Senior Ecological Engineer, assessed the potential effects of operational stormwater on behalf of Horizons and GWRC, including matters relating to water sensitive design.
76. A number of submissions raised the issue of stormwater in the Ō2NL Project's operational phase.
77. Mr Farrant acknowledges that the Ō2NL Project will create significant areas of pavement and associated hardstand that will result in stormwater during small to large rainfall events. This has the potential to

⁵⁹ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 132-140.

⁶⁰ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 144-145.

result in discharge of vehicle-related contaminants (including hydrocarbons, heavy metals and other particulates) and nutrients to waterways, cause changes in receiving environment temperature (due to the thermal mass of the pavement), modify hydrological features of the area (in particular in small frequent rainfall events) and an increases the risk of specific discharge events from spills or accidents.

78. Waka Kotahi proposes to manage this through a combination of vegetated swales and constructed wetlands, which are integrated with its proposed flood attenuation. Mr Farrant generally considers that the proposed stormwater management is comprehensive, with adequate space allocated for the intended water quality treatments.⁶¹
79. However, Mr Farrant states that detailed design plans for all operational stormwater devices will need to be provided, and that further work is required before he can be confident that the proposed stormwater management design will function as intended, including:
- (a) Confirmation of the location, and feasibility, of wetland infiltration systems;
 - (b) Assessment of where swales cross sensitive groundwater recharge areas east of Levin or potentially contaminated land, to inform where use of a suitably impermeable lining system is required, so that the treatment devices will not cause or continue contamination of local groundwater;
 - (c) Further assessment of the sizing of downstream wetlands, including a water balance exercise;
 - (d) Reconsideration of the lining of the proposed wetland forebays generally, and related design matters;
 - (e) Identification of the areas where capture of stormwater and discharge to treatment areas is not possible, to verify they are not discharging to sensitive receiving environments;

⁶¹ Section 87F Report – Stuart Farrant – Operational Stormwater, para 49-50.

(f) Further explanation as to how the design will allow control of unintended spills of contaminants from accidents.

80. Mr Farrant has recommended amendments to the conditions to require that the stormwater design provides for fish passage, and for the provision of a comprehensive stormwater operation and maintenance plan. He also recommends that the Regional Councils certify the comprehensive operation and maintenance plan, stormwater detailed designs, and planting plans and bathymetric design for wetlands, prior to works commencing. This level of oversight at detailed design is considered necessary to ensure the management system will perform as the application anticipates through its conceptual design.
81. In reliance on Mr Farrant's assessments and proposed conditions, I conclude that the actual and potential effects associated with operational stormwater management can be mitigated to an appropriate level.

Land Disturbance/ Earthworks/Sediment Control

82. Waka Kotahi addresses land disturbance/earthworks effects in the AEE⁶² and the issues are raised by a number of submitters.⁶³ Mr Kerry Pearce assesses these issues on behalf of Horizons and GWRC.
83. The proposal includes land disturbance activities approximately 364 ha with approximately 4–5 million cubic metres of cut material, including cut to fill, borrow to fill, and cut to waste.
84. Mr Pearce agrees with the overview in the Erosion and Sediment Control (ESC) report as to how erosion and sediment control can manage resultant effects on the receiving environment. Mr Pearce records the objectives of the ESC management which are to minimise the potential for sediment generation and discharge.⁶⁴
85. Considering the management plan structure of a Construction Environmental Management Plan ("CEMP"), an Erosion and Sediment

⁶² Volume II (Folder 4 of 12) – Appendix 4 Design and construction report, Appendix 4.3 Erosion and Sediment Control Technical Assessment Report and Volume III (Folder 5 of 12) Drawings and Plans – Section 13 – Erosion and Sediment Control Plans.

⁶³ Submission Nos 36, 59, 60, 73.

⁶⁴ Section 87F Report – Kerry Pearce – Erosion and Sediment Control, para 21-24.

Control Plan (ESCP) and Site Specific Erosion and Sediment Control Plans (“SSESCPs”), Mr Pearce observes that all ESC measures will be designed, constructed and maintained in accordance with GDO5 and the Waka Kotahi Guidelines. Noting that GDO5 is industry best practice and contains higher standards than the Waka Kotahi Guidelines, Mr Pearce is not comfortable with the use of both requirements (GDO5 and the Waka Kotahi Guidelines) for management of the ESC effects of the Ō2NL Project. Mr Pearce notes that use of the Waka Kotahi guidelines results in significantly smaller devices than GDO5. Mr Pearce records that the Waka Kotahi Guidelines are also intended to provide minimum requirements, noting that the Guidelines themselves recognise that a local standard may be more stringent. Despite the justification provided for use of the Waka Kotahi Guidelines in the application, Mr Pearce has concerns in particular compaction and the absence of information. Use of GDO5 across the Ō2NL Project is in Mr Pearce’s view appropriate.⁶⁵

86. In terms of the erosion and sediment control framework, Mr Pearce supports the use of SSESCPs as an effective structure to implement the most effective ESC solution to a changing site, but considers that in order to address the potential adverse effects from earthworks that:
- (a) All SSESCPs must be certified in writing by the Regional Councils prior to the commencement of works in the area covered by the SSESCP.
 - (b) Chemical treatment (flocculation), which is a key tool to assist in the sediment control efficiency of the sediment impoundment devices, should be the subject of a consent condition.
 - (c) Ongoing bench testing and chemical treatment of all sediment impoundment devices is necessary and should be the subject of a consent condition. Mr Pearce notes in this regard that there is no evidence of any preliminary bench testing as part of the consent application, so it is unknown how site soils will react to

⁶⁵ Section 87F Report – Kerry Pearce – Erosion and Sediment Control, para 25-38.

flocculation, noting the risk of overdosing from the proposed flocculation system where soils have a high permeability.

- (d) A specific condition should be included requiring progressive stabilisation of completed earthworks areas.
 - (e) Dewatering management procedures should be strengthened through a condition which requires that any discharge must meet a clarity standard or be via a sediment treatment device provided that the device is not currently in use and can impound water to achieve the required clarity.
 - (f) Spoil sites must be managed to ensure that they do not lead to any uncontrolled instability or collapse affecting either the spoil site or adversely affecting watercourses; and a condition of consent to this effect is required.
 - (g) Dewatering management procedures should be strengthened through a condition which requires that any discharge must meet a clarity standard prior to the discharge occurring.⁶⁶
87. As part of his assessment, Mr Pearce reviewed the sediment yield assessment undertaken by the Application and agrees with the methodology and the conclusion regarding the WLSE outputs, which he considers conservative in this context.⁶⁷
88. In relation to the erosion and sediment control monitoring plan (“**ESMP**”), Mr Pearce generally agrees with the intent and substance of the ESMP, with the exception of some recommended changes to conditions to address “as built” requirements; and rainfall trigger monitoring. Mr Pearce considers that all catchments should have some form of rainfall triggered monitoring to ensure ESC performance across the site. In addition, Mr Pearce considers that higher priority catchments should have a higher standard of monitoring and discharge standards for these areas.⁶⁸

⁶⁶ Section 87F Report – Kerry Pearce, Erosion and Sediment Control, para 39-50.

⁶⁷ Section 87F Report – Kerry Pearce, Erosion and Sediment Control, para 51-54.

⁶⁸ Section 87F Report – Kerry Pearce, Erosion and Sediment Control, para 63.

89. Mr Brown has recommended discharge standards and triggers for dewatering and ESC devices, which Mr Pearce supports. Noting the differences in real time and laboratory sampling for turbidity, total suspended solids (“TSS”) and clarity; and pH monitoring Mr Pearce agrees that the proposed conditions in part address these matters, but recommends amendments including that the inspections will check the operational integrity of all erosion and sediment control devices.⁶⁹
90. In his assessment of the CEMP, ESCP, and SSESCPs, Mr Pearce considers the implications of circumstances where GDO5 (as he recommends) does not achieve the recommend discharge standards required to minimise the adverse effect on the environment. Noting that processes for non-compliance are set out in the ESC report Mr Pearce considers these should be reflected in the conditions of consent.⁷⁰
91. Mr Pearce is of the view that a condition of consent should be included requiring all works in watercourse to be undertaken only when all flows can be diverted around the works area (e.g. beds are dry) and rapid stabilisation of areas occurs on completion of the works.⁷¹
92. Mr Pearce has reviewed the contained two SSESCPs referred to in the AEE, which he uses to illustrate the difference between the GDO5 requirements and the Waka Kotahi Guidelines. In addition, Mr Pearce notes that a number of performance outcomes, monitoring requirements and trigger procedures are recorded in the CEMP and ESCP, which should be, in his view, reflected in the conditions.⁷²
93. Relying on Mr Pearce’s and Mr Brown’s assessments, it is my view that, with the conditions recommended by Mr Pearce and Mr Brown, the actual and potential effects associated with land (erosion and sediment) disturbance, can be mitigated.

⁶⁹ Section 87F Report – Kerry Pearce, Erosion and Sediment Control, para 68.

⁷⁰ Section 87F Report – Kerry Pearce, Erosion and Sediment Control, para 74.

⁷¹ Section 87F Report – Kerry Pearce, Erosion and Sediment Control, para 75-76.

⁷² Section 87F Report – Kerry Pearce, Erosion and Sediment Control, para 84.

Terrestrial ecology and wetland ecosystems

94. The AEE addresses effects on terrestrial ecology⁷³ and effects of this nature were also raised by a number of submitters.⁷⁴ Mr James Lambie, on behalf of Horizons and GWRC, undertook an assessment of the Project on issues related to managing effects on terrestrial and wetland ecosystems.
95. Mr Lambie considers that the proposed construction envelope avoids significant areas of old growth indigenous forests and large wetlands and seeks to avoid effects on fauna through various strategies such as species translocations and avoiding habitat clearance at critical nesting times. While a number of remedies and mitigations to further minimise the effects on flora and fauna to the fullest extent possible have been proposed by Waka Kotahi, including the use of buffers, restoration of ecological linkages and a wildlife sanctuary, Mr Lambie notes that there are losses of areas of significant indigenous vegetation with residual significant ecological effects that cannot reasonably be avoided, remedied or mitigated.⁷⁵
96. Mr Lambie acknowledges that the policy frameworks under the One Plan and the PNRP provide for offsetting. Mr Lambie notes that, in this case, unavoidable losses within the Ō2NL Project are proposed to be managed through biodiversity offsetting for net gain.⁷⁶
97. Mr Lambie observes that there are differences between the level of faunal value of habitats reported by fauna experts and the vegetation value of habitat recorded in Technical Assessment J. However Mr Lambie does not consider these to be so significant to necessitate any change to the proposed approach to managing effects on biodiversity.

⁷³ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 50, Pages 272-2279 and Volume IV (Folder 10 of 12) Technical Assessment continued – J Terrestrial Ecology.

⁷⁴ Submission No.s 25, 41, 49, 62.

⁷⁵ Section 87F Report- James Lambie, Terrestrial Ecology, para 14.

⁷⁶ Section 87F Report- James Lambie, Terrestrial Ecology, para 14, 25-28.

98. Mr Lambie considers that the proposed offsets are appropriate only after the avoid, remedy, mitigate hierarchy has been met, and where biodiversity gains are commensurate with the type and scale of effect.⁷⁷
99. Mr Lambie concludes that the proposed offsetting and/or compensation is appropriate, noting that all the offsets are calculated for adverse effects that are higher than “low” (and not solely those habitats identified as significant under the One Plan and PNRP) and therefore the proposed scale of offsetting potentially goes beyond what is expected by the relevant plan provisions. Mr Lambie agrees that the offset calculations demonstrate that residual ecological effects are able to be appropriately managed and a net overall biodiversity gain can be achieved and maintained. He is also of the view that none of the affected habitats are so vulnerable and none of the adverse residual effects are so large that they are beyond the limits of offsetting.⁷⁸
100. Mr Lambie agrees that Te Ripo o Hinemata is an appropriate offset site for wetland effects management.⁷⁹ In comparing the offset proposals against the policy frameworks, Mr Lambie considers that the offsets are consistent with the regional plans of both Horizons and GWRC.⁸⁰
101. Mr Lambie considers that dust is a minor issue for the forest remnants adjacent to the construction envelope if it is managed within nuisance levels and the proposed buffers are implemented.⁸¹
102. In relation to buffer planting and linkages, Mr Lambie is of the view that the ecological plantings are essential for the mitigation of ecological effects, as well as the restoration and maintenance of natural character. Mr Lambie is particularly concerned that these proposed plantings are subject to third-party approval which may lead to the effects not being managed to the extent anticipated under the effects assessment.⁸²

⁷⁷ Section 87F Report- James Lambie, Terrestrial Ecology, para 14.

⁷⁸ Section 87F Report- James Lambie, Terrestrial Ecology, para 14, 75-89.

⁷⁹ Section 87F Report- James Lambie, Terrestrial Ecology, para 94-102.

⁸⁰ Section 87F Report- James Lambie, Terrestrial Ecology, para 103-112.

⁸¹ Section 87F Report- James Lambie, Terrestrial Ecology, para 63-65.

⁸² Section 87F Report- James Lambie, Terrestrial Ecology, 66-77.

103. In order to ensure delivery of the proposed approach for managing ecological effects, Mr Lambie has recommended a suite of condition changes to improve certainty on biodiversity outcomes.⁸³
104. Drawing on Mr Lambie's conclusion and his recommended changes to conditions, I am of the view that the effects on terrestrial ecology and wetland ecosystems will be more than minor in terms of biodiversity and that it is not until the offset/compensation measures are accounted for that the residual effects may be considered acceptable.

Landscape and Natural Character

105. The Applicant addresses the effects on natural character in the AEE⁸⁴ and in Technical Assessment D⁸⁵ and is a matter raised by a number of submitters.⁸⁶ On behalf of Horizons and GWRC Ms Julia Williams undertook a review of the natural character assessment.
106. At the outset, I note Ms Williams' opinion that there are no outstanding landscape areas within the Horizons or Greater Wellington regions along the Ō2NL Project alignment.
107. Ms Williams supports:
- (a) The methodology used to assess existing natural character levels, and the effects of the O2NL Project on natural character.⁸⁷
 - (b) The package of natural character mitigation measures across the Ō2NL Project area that are illustrated in the Planting Concept Plan and supplemented by the long term restoration concept set out in the Cultural and Environmental Design Framework (**CEDF**).⁸⁸
 - (c) The maintenance of natural character in each catchment once the proposed measures to rehabilitate and restore the natural

⁸³ Section 87F Report- James Lambie, Terrestrial Ecology, para 121-149.

⁸⁴ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 45, Pages 249-254.

⁸⁵ Volume IV (Folder 7 of 12) Technical Assessment continued – Technical Assessment D - Landscape, Visual and Natural Character.

⁸⁶ Submission No.s, 62, 74, and 80 – 90.

⁸⁷ Section 87F Report – Julia Williams- Natural Character, para 32-33.

⁸⁸ Section 87F Report – Julia Williams- Natural Character, para 34-38.

characteristics and qualities have been fully implemented as part of the Ō2NL Project.⁸⁹

108. While agreeing with the proposal to extend natural character riparian restoration planting beyond the designation and into private property, Ms Williams raises concerns with the Planting Concept Plans for areas outside the designation being “subject to landowner approval” and the implications of not providing the necessary mitigation/offset should that planting not be able to occur. Ms Williams records the importance of management of the effects on natural character being placed based.
109. As such Ms Williams recommends changes to the proposed conditions to require that Waka Kotahi enter into legal agreements and/or holds other authorisations necessary to allow entry onto land to undertake and maintain the proposed natural character mitigation before works authorised by the resource consents commence.⁹⁰
110. Ms Williams requires additional conditions to provide the Regional Councils with oversight of the natural character planting through the Ecological Management Plan (EMP) including its certification and ongoing management. Ms Williams recommends that Horizons and GWRC retain oversight of the CEDF and the landscape planting plans, plant schedules and specification for the natural character planting areas, and a role in monitoring the planted areas post implementation.⁹¹
111. Relying on the advice of Ms Williams, I reach the view that the effects on natural character will be appropriately mitigated, although only where effects are mitigated within the appropriate catchment, and at a local, not just catchment scale.

Surface water takes

112. Ms Michaela Stout from Horizons has assessed the proposed takes from the Ōhau River, and Koputaroa, Waikawa, Manakau and Waiauti Streams (all within Horizons jurisdiction). Mr Mike Thompson from GWRC has undertaken the assessment of the Waitohu Stream (within

⁸⁹ Section 87F Report – Julia Williams- Natural Character, para 39-44.

⁹⁰ Section 87F Report – Julia Williams- Natural Character, para 49-61.

⁹¹ Section 87F Report – Julia Williams- Natural Character, para 68-73.

the GWRC jurisdiction). Four submissions raised issues around the effects for the surface water takes,⁹² although some of these related to impacts on bores which Mr Williamson addresses in his s 87F report.

113. The proposal is for surface water takes for construction purposes, with the proposed takes from the Koputaroa, Waikawa, Manakau and Waiauti and Waitohu Streams all being assessed under the core and supplementary allocations. The proposed take from the Ōhau River is however, only proposed as a supplementary allocation take.

Waitohu Stream - GWRC

114. Mr Mike Thompson, Senior Scientist - Hydrology at GWRC has assessed the application in relation to the Waitohu Stream, which is to take water directly from the stream for construction purposes.
115. The application is to take water at a maximum rate of up to a maximum of 50 litres per second (L/sec) (provided it does not exceed 10 per cent of stream flow at any time) and a maximum volume of 2,160 cubic metres per day (m³/d). Mr Thompson notes that while the core allocation limit for the Waitohu Stream is 45 L/sec, with 7.5 L/sec currently allocated, the amount sought by Waka Kotahi appears to exceed the core allocation amount available by 12.5 L/sec. However, Mr Thompson notes that the 50 L/sec maximum rate may be intended by Waka Kotahi to also apply when supplementary allocation is being used.
116. Mr Thompson identifies that the median flow value calculated by Waka Kotahi (540 L/sec) is higher than the value listed in Table 2 of Schedule U of the PNRP (450 L/sec). In Mr Thompson's opinion the most appropriate threshold to use will depend on what system Waka Kotahi wish to utilise to access supplementary allocation. Mr Thompson recommends that the rates and volumes sought under core allocation policies and under supplementary policies be separated and a graduated abstraction system for supplementary allocation or a progressively higher static allocation amount of the band system be applied. Mr Thompson is of the view that this would allow the abstraction

⁹² Submission No.s 8, 59, 71 and 75.

to be managed in accordance with the appropriate limits and compliance thresholds.⁹³

117. Mr Thompson considers that the proposed rates and volumes of abstraction takes otherwise generally comply with the minimum flows, supplementary flows and allocation limits that are specified for this catchment in the PNRP and he concurs that the water takes are within the PNRP limits and likely to be no more than minor.⁹⁴

118. Aspects of the proposed take that require further attention include, in Mr Thompson's view:⁹⁵

(a) Effects immediately downstream of the point of take at flows at, or just above, minimum flow given likely natural stream flow losses to groundwater that have not been adequately accounted for in proposed abstraction regime. Therefore, Mr Thompson questions the conclusions in the application of "extremely small effect" and "less than minor" during periods of low flow (but unrestricted) take.

(b) Noting the uncertain nature of the relationship between abstraction and ecosystem impact and the need to be precautionary, Mr Thompson recommends a new consent condition that requires the take to be reduced by 50 per cent (of the maximum core allocation rate sought) when flow at the GWRC management gauge (Waitohu Stream at WSI) is between 140 and 185 L/sec. Mr Thompson consider this a more appropriate response to address the risks rather than undertaking further investigation or analysis.

(c) Mr Thompson also recommends a consent condition to require the flow rate measured at the WSI gauge to be adjusted to

⁹³ Section 87F Report – Michael Thompson – Surface Water Take and Allocation, para 17-18.

⁹⁴ Section 87F Report – Michael Thompson – Surface Water Take and Allocation, para 19, 83.

⁹⁵ Section 87F Report – Michael Thompson – Surface Water Take and Allocation, para 20-21, 85-91.

account for flow loss to groundwater between that site and the point of abstraction.

- (d) In collaboration with Ms Stout, Mr Thompson has suggested other several amendments and/or new conditions to adequately demonstrate compliance with the PNRP.

119. Recognising that the PNRP offers no specific criteria with which to assess the efficiency of this type of water use, Mr Thompson considers that it is unclear whether the amounts of surface water sought under the application are justified once other potential sources of construction water have been acquired (i.e. as a “top up”). To address this matter Mr Thompson recommends that Waka Kotahi should either:⁹⁶

- (a) be more specific about how much water is likely to be acquired from bores, and reduce the volume they are seeking to take from surface water accordingly; or
- (b) reduce the volume of surface water allocation by the same amount acquired once this latter figure has been established.

Ōhau River, and Koputaroa, Waikawa, Manakau and Waiauti Streams Assessment

120. For the proposed water takes, Ms Stout:

- (a) identifies the location and Schedule B values (from the One Plan);
- (b) assesses proposed core and supplementary takes allocations;
- (c) assesses the flow relationship between the abstraction sites and proposed monitoring sites; and
- (d) considers the efficiency of the water allocation.

121. Ms Stout confirms that the proposed water takes fit within the relevant core allocation limits set out in Schedule C of the One Plan, and the

⁹⁶ Section 87F Report – Michael Thompson – Surface Water Take and Allocation, para 22.

abstractions will cease below the minimum flows set out in Schedule C of the One Plan.

122. For both the core and supplementary allocation, Ms Stout notes that Waka Kotahi;
- (a) Proposes to base the rate of take on 'actual' river flow, up to a maximum rate of take in the case of the core allocation.
 - (b) Does not propose to measure river flow at the proposed abstraction sites, and are instead proposing to extrapolate flow data measured at existing flow recorders either upstream or downstream of the proposed abstraction, to the proposed abstraction sites.
123. In assessing the above methods, Ms Stout concludes that:
- (a) In the Ōhau, Manakau, and Waiauti Streams the flow recorders can provide a reasonable estimation of actual river flow at the proposed abstraction sites.
 - (b) In the Waikawa Stream, an adjustment factor is recommended when extrapolating flow data to the abstraction sites below the median flow, due to apparent streamflow losses between the flow recorder and the abstraction site.
 - (c) In the Koputaroa Stream, same-day gauging data is collected to support the adjustment factor proposed to extrapolate flow data to the proposed abstraction site due to uncertainty about where streamflow may be gaining from/losing to groundwater between the proposed abstraction site and the flow recorder.
 - (d) Waka Kotahi should consider the 'time lag' between flows measured at the flow recorders and the flows at the abstraction sites. This time lag is most relevant in the application of the trigger flows to commence and cease the supplementary allocation. Ms Stout recommends that consent conditions are

introduced, to ensure that the takes only occur when flows are above median flow at the proposed abstraction sites.⁹⁷

124. Ms Stout acknowledges Waka Kotahi now propose that the rate be limited based on the mean daily flow on the preceding day, which simplifies the operation and monitoring of the takes. However, Ms Stout has concerns that this approach may have unintended adverse effects. Primarily, Ms Stout notes that the river flows can vary considerably, particularly as they rise above the median flow, within a short period of time, meaning that the mean daily flow on the preceding day will not always provide a reasonable estimate of river flow on the following day.
125. In relation to the supplementary allocation, Ms Stout notes that the revised method for estimating 'actual river flow' could mean that the proposal does not comply with the restrictions set out in Policy 5-17, which requires abstractions to be limited to 10% of actual river flow. Ms Stout concludes that further information is required to illustrate how the proposed conditions will ensure that the supplementary allocation is consistent with the restrictions in Policy 5-17, including, Policy 5-17(b).⁹⁸
126. The revised method for estimating 'actual river flow' also means the rate of take under the core allocation could be higher than 10% of the actual river flow at the time of take if flows recede quickly after a peak in river flow. Mr Brown has considered these effects further in his section 87F, including whether additional matters of control may be required to manage effects on the values of waterways.
127. Ms Stout has not assessed whether the proposed use of water is reasonable or efficient, as this is outside her area of expertise. However, she considers that further information should be supplied to illustrate that the proposed allocation is efficient from an allocation perspective (i.e. to illustrate that no more water has been applied for than is needed to meet the projected demands of the project with reasonable security).⁹⁹

⁹⁷ Section 87F Report – Michaela Stout – Surface Water Take and Allocation, para 21.

⁹⁸ Section 87F Report – Michaela Stout – Surface Water Take and Allocation, e.g. para 149.

⁹⁹ Section 87F Report- Michaela Stout, Surface Water Take and Allocation, para 25, 138-144.

128. In collaboration with Mr Thompson from GWRC, Ms Stout has recommended amendments to the conditions to address the matters raised in her report.
129. Subject to the to the revised conditions recommended by Mr Thompson and Ms Stout, the further information requested by Ms Stout, and the matters raised by Mr Brown, I consider the water takes meet the allocation requirements and the potential effects of the abstraction and use from the takes Koputaroa, are able to be appropriately managed.

Contaminated Land

130. Ms Sarah Newall, a contaminated land consultant, has assessed the regional consent applications on behalf of Horizons and GWRC, and the NoRs for HDC and KCDC.
131. Resource consents under the NES-CS and/or the One Plan and PNRP are not included as part of the application.¹⁰⁰ Nonetheless, the AEE includes a section on contaminated land,¹⁰¹ as well as the associated technical assessment.¹⁰² In addition, the proposed conditions at REW4, sets out proposed processes for addressing contaminated soil discovery and investigation.
132. Ms Newall considers the approach of addressing contaminated land matters as part of later process to be reasonable.¹⁰³ However, Ms Newall is not confident that the Preliminary Site Investigation (PSI) is complete because a full site walkover has not been undertaken and as such, all HAIL sites within the project area identified. Ms Newall is concerned that there are likely to be HAIL sites that have not been identified, and therefore the list of sites requiring further investigation, as currently set out in proposed condition REW4, is likely to be too narrow, and not representative of the true number of sites to which the NES-CS and regional rules may apply.

¹⁰⁰ Volume IV (Folder 9 of 12) – Technical Assessment continued, Technical Assessment I: Contaminated Land, Page 3, Para 4.

¹⁰¹ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 49, Pages 270 – 272.

¹⁰² Volume IV (Folder 9 of 12) – Technical Assessment continued, Technical Assessment I: Contaminated Land.

¹⁰³ Section 87F and 198D Report – Sarah Newall – Site Contamination – para 35.

133. Noting the site access constraints, Ms Newall's view is that the PSI should be updated and revised following a full site walk over once access to land has been granted.
134. In relation to the PSI methodology, Ms Newall has concerns with regard to the risk screening system used (that it is not fit for purpose), and is of the view that the NES-CS sets out the appropriate method for assessment without adopting a separate risk screening assessment.¹⁰⁴
135. Ms Newall has recommended amendments to proposed condition REW4, to address the matters she has identified in her review, including the requirement for a fully revised PSI to be undertaken via a full site walkover once full site access is established. I have amended REW4 in light of that recommendation.

Cultural effects

136. Effects on cultural values are addressed in the AEE.¹⁰⁵ In addition, the application includes Cultural Impact Assessments ("CIA") from the Project Iwi Partners namely, Muaūpoko Tribal Authority Inc and Lake Horowhenua Trust, Ngā Hapū-o-Ōtaki (Ngā Kapū), Ngā hapū o Kererū (Kōpūtōroa Stream), Ngāti Huia Collective, Ngāti Tukorehe Trust, and Te Kotahitanga o Te Iwi o Ngāti Wehi Wehi.¹⁰⁶
137. It is understood that the Iwi Project Partners and Waka Kotahi have adopted a set of principles that underpin the concept design of the Ō2NL Project (Cultural and Environmental Design Framework (CEDF)) including construction methodologies for the management of adverse effects of the Project, through avoidance and minimisation. For each of the Project Iwi Partners the AEE generally sets out in summary, the residual effects and the how those effects are proposed to be managed.
138. The AEE summaries the avoidance on key values identified through the CEDF as:

¹⁰⁴ Section 87F and 198D Report – Sarah Newall – Site Contamination, para 79-104.

¹⁰⁵ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 40, Pages 185 - 205.

¹⁰⁶ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 40, Pages 185 - 205.

To tread lightly, with the whenua –

- avoiding effects on groundwater that feeds Punahau/Lake Horowhenua;
- avoiding cutting into maunga;
- avoiding earthwork cuts across spiritual pathways and reconnecting them with overbridges;
- avoiding effects on Ōhau, Kuku, Waikawa and Manakau awa, and otherwise providing for fish passage in other awa;
- avoiding effects on native forest remnants wherever possible;
- designing stormwater and drainage so as to avoiding mixing catchments, and to allow current awa patterns of movement to be retained (the same as pre-development);
- designing earthworks to reduce the need to take earth between catchments.

Create an enduring legacy

- designing the proposed restoration planting in accordance with ki uta ki tai; to restitch the landscape together and restoring connections that align with mountains to sea principles;
- designing so as to restore access to awa (at Waikawa Stream) but also potentially the northern bank of the Ōhau River;
- planting types that afford rongoa and mahinga kai opportunities; and
- ongoing involvement of Iwi Partners in the design (through the CEDF Design Audit process, management plans) and

then construction (through karakia and site observation) of the Project.¹⁰⁷

139. The AEE further states that Project Iwi Partners will continue to be involved in the Ō2NL Project through the design and construction phase of the project including where:

Additional cultural effects are identified which relate to matters associated with celebrating the cultural landscape, the need for iwi's ongoing involvement in the design of Project (the material supply sites, local road connections and gateways), and the need to provide long term access to cultural resources.¹⁰⁸

140. The Applicant has proposed a suite of conditions under Tangata Whenua Values in the NoR conditions¹⁰⁹ in relation to Karakia, Tangata Whenua Oversight, Muaūpoko and Ngāti Raukawa ki te Tonga Management plans and the CEDF. I observe that the Tangata Whenua Value conditions are referenced as a specific condition in the AEE,¹¹⁰ however, while such a condition appears in the proposed NoR conditions,¹¹¹ the condition is not referenced in the proposed Regional Council conditions. I recommend the conditions address this matter.
141. A number of submissions on the application raise cultural effects and while uniformly not opposed to the project, have raised issues as to the proposed conditions.¹¹²
142. Rangitāne o Manawatū (Sub # 63) has concerns about the accuracy and historical narrative included in the AEE documentation and seek amendments to the conditions¹¹³ which in summary relate to

¹⁰⁷ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 40, Pages 204 - 205.

¹⁰⁸ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 40, Page 205, Para 3.

¹⁰⁹ Volume II (Folder 4 of 12) - Assessment of Effects on the Environment continued – Appendix 5 – Tangata Whenua Values Page 19 and Schedule 3 and 4.

¹¹⁰ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 60, Page 309 Table 60-1 Measures to manage adverse effects.

¹¹¹ Volume II (Folder 4 of 12) - Assessment of Effects on the Environment appendices continued, Appendix 5, Page 19.

¹¹² Submission No. 63, 74, 80, 81, 83 -90.

¹¹³ Submission No. 63, Page 10, Para 27.

acknowledgement, consultation and the inclusion of Rangitāne in CDEF.¹¹⁴

143. Muaūpoko Tribal Authority (Sub #74) similarly have concerns about the accuracy and historical narrative included in the AEE documentation, how the principle of mana whakahaere is addressed in the design and implementation process, matters excluded from the CDEF, in relation to archaeology how the tikanga of Muaūpoko is to be addressed in the conditions, how Muaūpoko values will be addressed through the construction and operation phase, and that Muaūpoko tikanga in the Horowhenua block is not acknowledged. Muaūpoko seek amendments to the CDEF and conditions to address these matters.¹¹⁵
144. Ngāti Raukawa ki te Tonga (the Hapū) (Sub #80) is a collective submission from ten (10) hapu, namely, Ngā Hapū o Otaki on behalf Ngāti Kapumanawawhiti, Ngāti Hikitanga, Ngāti Huia ki Poroutawhao, Ngāti Huia ki Mātau, Ngāti Kikopiri, Ngāti Ngarongo, Ngāti Pareraukawa, Ngāti Takihiku, Ngāti Tukorehe and Ngāti Wehiwehi. In addition, individual submissions, repeating the wording of collective submission were received from Ngā Hapū o Otaki on behalf of Ngāti Kapumanawawhiti (Sub #81), Ngāti Huia ki Poroutawhao (Sub #83), Ngāti Huia ki Mātau (Sub #84), Ngāti Kikopiri (Sub #85), Ngāti Ngarongo (Sub #86), Ngāti Pareraukawa (Sub #87), Ngāti Takihiku (Sub #88), Ngāti Tukorehe (Sub #89) and Ngāti Wehiwehi (Sub #90).
145. These submissions support the applications, acknowledging the collaboration with Waka Kotahi in working towards mitigation of potential effects and the importance of the CDEF. The submitters are concerned that core values of the CDEF have not been reflected in the NoR and resource consent conditions and require further work. The identified issues include, in summary, a need to reflect their cultural values, address matters of concern identified in the hapū CIAs, embed the CDEF as the framework for delivering the Ō2NL Project, and ensure

¹¹⁴ Submission No. 63, Page 11, Paras 1 – 3.

¹¹⁵ Submission No. 74, Page 19, Paras 1 – 5.

opportunity for hapū participation in design, construction and monitoring of the Ō2NL Project.¹¹⁶

146. As identified above, all of the above submitters support or are not opposed to the Ō2NL Project. Equally all the submitters are of the view that conditions as lodged are inadequate and therefore the residual cultural effects to the Ō2NL Project have not been mitigated. I understand that Waka Kotahi is working with the submitters to further refine the conditions to address the matters raised. It may be that further information is forthcoming in respect of the Iwi Project Partners and submitters views as to these effects during the hearing process. Should additional information be presented by Iwi Project Partners or submitters, I will reassess my opinion at that time.

Positive Effects

147. The Applicant has addressed positive effects of the proposal in the AEE. This has been addressed throughout the documentation in Section C – Description of the Project and Part G: Assessment of Effects on the Environment. In summary:
- (a) A safer, more efficient, and resilient transport network;
 - (b) Increased network resilience;
 - (c) Improved connectivity, modal choice and recreational benefits through the provision of the shared path;
 - (d) Positive social effects including the increase in access points for fishing on the Wakawa Stream and Ōhau River;
 - (e) Support regional economic activities and productivity including through reductions in operating costs and travel times
 - (f) A range of environmental benefits including;
 - (i) A net gain in biodiversity through habitat restoration, riparian planting, stream retirement, stock exclusion fencing, maintenance and weed and pest control which

¹¹⁶ E.g. Submission No. 80, Page 6, Para 25.

will improve water quality and habitat connectivity, resulting in positive landscape and biodiversity enhancements within the area;

- (ii) Provision of fish passage for culverts; and
- (iii) Providing stormwater treatment on the new highway improving water quality in streams and contributing to the overall improvement of the receiving catchments.

148. I concur with the Applicant's assessment of the positive effects of the Ō2NL Project, subject to any recommendations of the technical experts I have described earlier in this report. Generally speaking, however, I adopt the description of positive effects as part of my report. That said, in line with my understanding of relevant case law, I have not considered positive effects when examining effects under section 104D(1)(a).

Summary of actual and potential effects on the environment

149. After reviewing the AEE and accompanying technical assessments, the mitigation proposed by way of monitoring and conditions, the technical reviews undertaken by the Horizon's and GWRC's section 87F experts, and having considered the matters raised in submissions, I consider that with the recommended conditions in Appendix 19, a number of the effects can be mitigated to a level which is minor or less than minor. However, putting to one side any beneficial or positive effects of the Project, in my view there is a high level of effect that remains for:

- (a) Terrestrial ecology, particularly the loss of indigenous biodiversity values including those identified under the One Plan and the PNRP; and
- (b) Freshwater ecology concerning the loss and modification of stream habitat.

150. I also rely on the report of Mr Brown regarding the effects on water quality in some sensitive catchments.¹¹⁷ The imposition of robust performance standards, in-stream monitoring, and a requirement for

¹¹⁷ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 64.

effects to be addressed once discovered, is critical to managing the effects on water quality in catchments within Horizons and GWRC.

151. I note there remain cultural effects which are unresolved through the imposition of conditions which are acceptable to iwi and hapū.
152. I am also unable to reach a view on the extent of hydrology and flooding effects, although I note that Mr Kinley has a low level of confidence in the conclusions reached by Waka Kotahi regarding the level of effect. Presently, and subject to the receipt of further information, Mr Kinley considers that flooding impacts are likely to be more than minor.

O. STATUTORY ASSESSMENT

153. As addressed earlier in this report, while this is a section 87F of the RMA report, I have in accordance with section 42A (1A) and (1B) of the RMA attempted to minimise the repetition of information included in the application and where I have considered it appropriate, adopt that information. As a starting point therefore, I adopt the objectives and policies assessment as provided by Waka Kotahi and will provide additional commentary below on the objectives and policies that I consider relevant to the suite of consent applications, or where my view differs from that of the Applicant.

National Environmental Standards (NES)

154. As I identify above, I consider the applicable NES's for this proposal to be the NES-F, the NES for Air Quality, the NES for Assessing and Managing Contaminants in Soil to Protect Human Health, and the NES for Sources of Human Drinking Water.

NES for Freshwater

155. The NES-F came into effect on 3 September 2020 and was subject to a number of amendments, with the latest Amendment 2 coming into effect on 5 January 2023.
156. Waka Kotahi has set out the regulations applicable to the Ō2NL Project, namely:

- (a) specified infrastructure in natural wetlands (Subpart 1, Regulation 45);
- (b) the reclamation of rivers (Subpart 2, Regulation 57); and
- (c) the passage of fish affected by structures (Subpart 3, Regulations 70 and 71).¹¹⁸

157. The consenting pathway for these activities is as discretionary activities. I note that the application was lodged before Amendment 2 to the NES-F came into effect. The amendments to the NES-F generally includes changes to the definition of natural wetland, and consenting pathways for quarrying, landfills and cleanfills, and mineral extraction activities. I note that Mr Lambie has addressed the potential implications with the change in definition of natural inland wetland for the offsetting regime and has suggested further consideration be given to the new definition in his section 87F report.¹¹⁹ Finally, I note that I have not identified any amendments in the NES-F around 'specified infrastructure' that alter the requirements for what has been applied for in the application as lodged.

NES for Air Quality

158. The NES for Air Quality ("NESAQ") 2004 came into effect on 8 October 2004 and was amended on 1 June 2011. Relying on the Air Quality Technical Assessment C,¹²⁰ and Mr Stacey's review of that document, I concur with the statements in the application that the dust emission from the Ō2NL Project will be within the NESAQ ambient air quality standard.¹²¹ Mr Stacey's advice is otherwise that, subject to imposition of his recommended conditions, the adverse effects from discharges to air from construction should be able to be managed to ensure an appropriate level of air quality.

¹¹⁸ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 19.6, Pages 93-95.

¹¹⁹ Section 87F Report- James Lambie, Terrestrial Ecology, para 38.

¹²⁰ Volume IV (Folder 7 of 12) – Technical Assessments continued: Technical Assessment C. Air Quality.

¹²¹ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I – Statutory Assessment, Section 64.1, Pages 325-326.

NES for Assessing and Managing Contaminants in Soil to Protect Human Health

159. The NESCS came into effect on 1 January 2012.
160. The PSI identified thirty-six (36) potential areas of soil contamination, of which 28 were activities on the Hazardous Activities and Industries List (“HAIL”) identified as market gardens and orchards and one (1) site identified as a former landfill. The PSI was undertaken without access to the entire project site. Waka Kotahi proposes to undertake detailed investigation of the entire site once access to land has been established and then to apply for any required resource consents in the future. As part of that future process a Contaminated Soil discovery and investigation condition has been offered by Waka Kotahi with the requirements imposed by the condition to be met prior to any earthworks or land disturbance occurring on site (see condition REW4).
161. While no applications for consent have been lodged for activities involving contaminated land as part of this application, insofar as condition REW4 is offered as a condition of consent, in my view the NES-CS is a relevant consideration.

NES for Sources of Human Drinking Water

162. The NES for Sources of Human Drinking Water came into effect on 20 June 2008.
163. Regulation 7 of the NES for Sources of Human Drinking Water sets out that a Regional Council must not grant a discharge permit for an activity that will occur upstream of an abstraction point, if the discharge or water take will result in the drinking water not meeting health quality criteria or exceeding aesthetic guidelines. The regulation applies to abstractions serving at least 501 people for more than 60 calendar days a year.
164. Regulation 8 prevents the grant of discharge permits upstream of an abstraction point where drinking water is not tested.
165. Regulation 12 of the NES requires consideration of whether the activity being considered could result in an event (the example of a spill is given), or as a consequence of an event (an example of heavy rainfall is

given) that may have a significant adverse effect on the quality of water at any abstraction point. Regulation 12 applies to abstractions serving at least 25 people for more than 60 calendar days a year. This regulation further stipulates that if the situation described above applies, a condition must be imposed on the resource consent which requires notification of the registered drinking water supply operators.

166. I have reviewed the location of bore information and registered drinking water sites held by Horizons and GWRC. The application states:

One Registered Drinking Water Supply (as defined in the NES Drinking Water) abstraction point is located downstream of the locations where the Project crosses the Waikawa Stream. This supply is recorded as being for domestic and dairy/stock water purposes.¹²²

167. On review of the drinking water register I was unable to identify any registered water downstream of the project area on Waikawa Stream. I did identify though the Horizons resource consent register the actual take details from the Waikawa Stream (ATH-2012014503.00) (See a copy of the consent in Appendix 20).

168. The drinking water register includes a public registered supply at Otaki (OTA003). The supply is sourced from groundwater via bores and services 7670 persons. Mr Williamson has addressed in his evidence that the bores are 3500 - 3900 metres from the Ō2NL Project and are considered unaffected by the proposal. Mr Williamson notes the capture zone for one of the bores, on the basis that it has a relevant protection zone that partially intersects the proposed road alignment. However, given the travel time for the water to reach the bore and the highly permeable nature of the aquifer, Mr Williamson's view is that there will no impact on the water quality or quantity.¹²³

169. At the time of preparing this report, there are two bores at Tatum Park, Bores 1 and 2 that are listed as in the process of being registered. Mr Williamson notes that the Ō2NL Project passes through the groundwater

¹²² Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 64.2, Page 326, Para 3.

¹²³ Section 87F Report – Jon Williamson – Groundwater, para 59.

capture zone, however, given, *“the distance and the nature of the Ō2NL Project, which is designed for hydrological neutrality and has suitable stormwater management to protect surface and groundwater water quality, I do not consider the holiday park is likely be affected by the Ō2NL Project.”*¹²⁴

170. Having regard to the above, in my view the NES for Sources of Human Drinking Water is not directly relevant when considering the Project.

National Policy Statements (NPS)

171. In my view, the applicable NPS’s for the consent applications is the NPS for Freshwater Management. I understand Ms Anderson has assessed the NPS for Urban Development and NPS for Highly Productive Land.

NPS for Freshwater Management

172. The National Policy Statement for Freshwater Management (“NPS-FM”) 2020 came into effect on 3 September 2020. Amendments were made in December 2022 which took effect on 5 January 2023. The Minister for the Environment made further amendments under section 53(2)(a) of the RMA on 23 February 2023. I note that these latest amendments came into effect post the lodgement of the application.
173. Waka Kotahi has set out an assessment of the relevant provisions of the NPS-FM,¹²⁵ as to the potential effects of the Project albeit prior to the December 2022 and February 2023 amendments. I have reviewed the amendments to the NPS-FM, which primarily address matters that (insofar as relevant to this particular project) relate to the definition of natural wetland, principles of offsetting and compensation, water storage for specified infrastructure, and restoration provisions. There are no amendments to the objectives and policies of the NPS-FM.
174. I concur with the statement in the application that the NPS-FM addresses, as a matter of national significance, the management of

¹²⁴ Section 87F Report – Jon Williamson – Groundwater, para 62.

¹²⁵ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I Statutory Assessment, Section 63, Pages 316 – 321.

freshwater through a framework that considers and recognises Te Mana o te Wai as an integral part of freshwater management.¹²⁶

175. I also record that the NPS-FM states that there is a hierarchy of obligations in Te Mana o te Wai that prioritises:
- (a) First, the health and well-being of water bodies and freshwater ecosystems;
 - (b) Second, the health needs of people (such as drinking water); and
 - (c) Third, the ability of people and communities to provide for their social, economic and cultural wellbeing, now and in the future.
176. The application sets out that the Ō2NL Project is consistent with the objectives and policies of the NPS-FM, which I have summarised as follows:
- (a) The effects avoidance and management measures for the Ō2NL Project (including with regard to freshwater) have been developed in partnership with tangata whenua (Policy 2).
 - (b) Development of the Ō2NL Project will allow for people and communities to provide for their health and safety and their social, economic and cultural well-being (Policy 15).
 - (c) The Ō2NL Project avoids adverse effects on the health needs of people by avoiding effects on watercourses where municipal water takes are located, and on domestic water supply groundwater bores; and
 - (d) Adverse effects on human health from over-allocation are avoided through mitigation of effects associated with water takes for construction, and the fact that surface water takes sought are

¹²⁶ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part G – Assessment of Effects, Section 63.1, Page 316.

temporary in duration and will expire at the completion of construction of the Project (Policy 11).¹²⁷

177. I note with regard to the avoidance of adverse effects on groundwater bores that Mr Williamson has since made some further recommendations in his section 87F report.
178. In my view the following additional policies are also relevant;
- (a) Once operational, the Ō2NL Project will improve the overall quality of freshwater through improved stormwater treatment as detailed in the Stormwater Technical Assessment Report¹²⁸ and Water Quality - Technical Assessment H.¹²⁹ The proposed treatment scenario is an improvement on the existing situation where no formal treatment of stormwater runoff from the existing state highway roads within the Project area is provided¹³⁰ (Policies 5 and 12).
 - (b) Appropriate erosion and sediment controls will be implemented during construction in accordance with GD05¹³¹ (Policies 5 and 12).
 - (c) Although the Project will result in the permanent loss of sections of streams and wetlands, it is proposed to offset these effects via new stream channels (stream diversions), wetland restoration and riparian planting/enhancement to achieve no net loss of ecological function overall¹³² (Policies 6 and 7).
 - (d) The integrated management of fresh water and the use of land and development has been appropriately considered in the

¹²⁷ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I Statutory Assessment, Section 63.1, Page 317.

¹²⁸ Volume II (Folder 4 of 12) - Assessment of Effects on the Environment appendices continued, Design and Construction Report, Appendix 4.2 Stormwater Technical Assessment Report.

¹²⁹ Volume IV (Folder 9 of 12) – Technical assessments continued, Technical Assessment H – Water Quality.

¹³⁰ Section 87F Report – Stu Farrant - Operational Stormwater, para 21-30.

¹³¹ Section 87F Report – Kerry Pearce – Erosion and Sediment Control, para 14, 27-31.

¹³² Section 87F Report – Logan Brown – Freshwater Ecology, para 132-145.

proposed stormwater management design for the Project (Policy 3).

179. Based on the Applicant's AEE and supporting material, I conclude that the Ō2NL Project activities are generally consistent with the objectives and policies of the NPS-FM.

180. However, as I have referred to earlier, Mr Lambie's Section 87F Report notes the December 2022 amendment to the definition of natural wetland, and states that it:

...may cause some pasture exotic grass-dominated wetlands that were previously assessed as not natural wetlands to now be captured under the definition if the pasture species are not those on the National List of Exotic Pasture Species list. Without further information to assess the type of pasture species within the application, I am unable to determine whether there are more pasture-dominated wet areas that might meet the revised definition. In my opinion, these wet areas should be assessed against the new definition, and where necessary, the effects hierarchy in the One Plan and PNRP.¹³³

181. In my view this information gap does not impact on the assessment of the objectives and policies. Rather, the implication appears to be that there may be an increase or decrease in the area being offset. Having reviewed Mr Lambie's report the conditions may need to be amended to signal where the recalculated assessment of wetland areas is required. This will require further discussion between the terrestrial ecologists.

182. Mr Brown is also of the view that the application does not provide the information to be able to assess the effects on lakes, which includes the discharge to the O-te-pua Wetland (and lagoon system), as required by the NPS-FM for attribute states under the NoF.¹³⁴ This information is required in order to complete the analysis under the NPS-FM.

¹³³ Section 87F Report – James Lambie, Terrestrial Ecology, para 38.

¹³⁴ Section 87 F Report – Logan Brown – Water Quality and Aquatic Ecology, para 77-80.

183. I concur with Waka Kotahi's assessment that the project is consistent with clauses 3.22(1)(b) and 3.24(1) of the NPS-FM in that;

- The activity (the Project) is necessary for the construction of specified infrastructure; and
- The Project will generate regional and national benefits; and
- The Project has a functional need to be located and to operate in, and traverse, the selected location; and
- The effects management hierarchy has been applied to the management of the effects of the activity (including through offsetting and compensating for the unavoidable loss of extent of natural wetland and streams).¹³⁵

184. In addition, relying on the assessment of Mr Brown and subject to the conditions recommended by the Regional Council experts, the requirement to maintain or improve fish passage in clause 3.26(1) of the NPS-FM has generally been met and the correct design guidelines have been applied.¹³⁶

185. The Regional Council expert reports, in particular the reports of Mr Brown, Mr Lambie, Mr Farrant and Mr Pearce, otherwise record that additional conditions as to discharge standards, erosion and sediment control measures, and offset are required in order to ensure that the application is consistent with policies 5, 6, 7, 9 and 10 of the NPS-FM. The imposition of those conditions will ensure that improvements in water quality and protection or avoidance of loss occur.

Horizons Regional Policy Statement and Regional Plan (One Plan)

186. The One Plan is Horizons' Regional Policy Statement and Regional Plan. It is a combined Regional Policy Statement and Regional Plan.

¹³⁵ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I Statutory Assessment, Section 63, Page 320.

¹³⁶ Section 87 Report – Logan Brown, Water Quality and Aquatic Ecology, para 121-131.

187. Part 1 of the One Plan is the Regional Policy Statement and Part 2 is the Regional Plan. It was first notified in May 2007 and became fully operative on 19 December 2014. Plan Changes PC-1 (2016) and Plan Amendments 1 (2018) and 2¹³⁷ (2022) are operative. Proposed PC-2 (2019) is under appeal, and is focused on the management of nutrient losses and as such is not considered relevant to the Ō2NL Project.

Horizons Regional Policy Statement (RPS)

188. I have assessed the application against what I consider to be the relevant policies of the RPS, with those that require specific comment set out below. For the most part these are included in Waka Kotahi's assessment¹³⁸ and so are not repeated in full.

Chapter 2 - Te Ao Maori	
Policies 2-2 (sites of significance); 2-3 (mauri of water); 2-4 (other resource management issues).	Objective 2-1 (resource management)

189. The statutory assessment in the application identifies the relevant objective (Objective 2-1) and policies (Policies 2-2, and 2-4) as they relate to the Ō2NL Project. The assessment concludes that the project is consistent with the objective and policies. It notes:

- (a) Waka Kotahi's partnership with Muaūpoko Tribal Authority Inc and the Lake Horowhenua Trust, Ngā Hapū-o-Ōtaki (Ngā Kapū), Ngā hapū o Kererū (Kōpūtōroa Stream), Ngāti Huia Collective, Ngāti Tukorehe Trust, and Te Kotahitanga o Te Iwi o Ngāti Wehi Wehi;
- (b) the input of the Iwi Project Partners in both the design (including proposed mitigation) and implementation of the Project, with

¹³⁷ Amendments to comply with Resource Management (National Environmental Standards for Freshwater) Regulations 2020 and National Policy Statement for Freshwater Management 2020 (NPS-FM 2020) amended Dec 2022.

¹³⁸ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I Statutory Assessment, Section 65.2, Pages 327 – 338 and Appendix two.

specific regard to the principles of the CEDF ('Tread lightly with the whenua' and 'Creating an enduring legacy'); and

- (c) not directly affecting any sites of significance, and the inclusion of conditions as to accidental discovery protocols.
190. The application also refers to the incorporation of resource issues of relevance to iwi and hapu. See pages 328 – 329 of Volume II (Folder 2 of 12). Examples of these resources include:
- (a) Management of water quality and quantity throughout the region does not provide for the special qualities significant to Māori;
 - (b) Hazardous substances and nitrate run-off need to be better managed to avoid contaminants entering water;
 - (c) Lakes and streams (for example, Punahau) have suffered degradation which continues and are considered culturally unclean;
 - (d) Access to and availability of clean water to exercise cultural activities; and
 - (e) More riparian retirement and planting to protect riverbanks from erosion.
191. Policy 2-3 "The mauri of water" is in my view also applicable to the assessment of the Ō2NL Project. The proposal is to take water for construction purposes within the core allocations or as supplementary takes above median flow. A minimum flow condition is included with the application (RWT1e). While not addressed in the application, in my view the abstraction method and proposed condition are consistent with the policy.
192. Conditions of consent are proposed to address Tangata Whenua Values.¹³⁹ As identified above, the Iwi Project Partners and others as submitters, while supporting the Ō2NL Project, consider the proposed conditions inadequate and therefore the residual cultural effects to the

¹³⁹ Volume II (Folder 4 of 12) - Assessment of Effects on the Environment appendices continued, Appendix 5, Page 19.

Project have not been mitigated. I understand that Waka Kotahi is working with the Iwi Project Partners and submitters to refine conditions to address the matters raised. Should those matters be addressed, then, in my view, the proposed activities would be consistent with Objective 2-1 and Policies 2-2, 2-3 and 2-4.

Chapter 3 – Infrastructure	
Policy 3-1 (benefits of infrastructure); 3-2 (adverse effects on regional or national importance); 3-3 (adverse effects of infrastructure); 3-14 (identification of priority contaminated land); 3-15 (management of priority contaminated land).	Objective 3-1 (Infrastructure); 3-5 (waste, hazardous substances and contaminated land).

193. The statutory assessment included in the application addresses these objectives and policies¹⁴⁰ and for the most part I concur with that assessment.
194. In relation to Policy 3-3b) which allows minor adverse effects arising from the establishment of new infrastructure, I note that Mr Kinley is of the opinion (on the information before him) that there is insufficient information to support the conclusions as to effects in the application. However, on the information available, Mr Kinley is of the opinion, the effects are likely to be more than minor. Further information has been requested by Mr Kinley in his section 87F report. Relying on that assessment it follows that the impacts of flooding have not been avoided, remedied or mitigated and Policy 3-3 (c) (iv) has not been met.
195. Apart from flooding, I concur with Waka Kotahi’s assessment as to the applicability of Policy 3-3(c). This policy is directive and establishes a hierarchy when considering any adverse environmental effects associated with the establishment of infrastructure. After considering the options to avoid, remedy or mitigate effects from the Ō2NL Project, there remains significant residual effects as to terrestrial and freshwater ecology, which Waka Kotahi has sought to offset or compensate in

¹⁴⁰ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I Statutory Assessment, Section 65.2.2, Pages 329 – 331.

circumstances where there are functional, operational or technical constraints associated with delivery of necessary infrastructure.¹⁴¹

196. I note that Policy 3-3 c) iv. only refers to offsetting, which includes the use of financial contributions. I address the matter of offset and compensation further in my assessment of Policy 13-4 below. It is my opinion that the imposition of effective and enforceable consent conditions for managing effects is of particular relevance in meeting Policy 3-3(c) as it relates to the avoidance, remedying or mitigation of new infrastructure, with adherence to (iv) as to appropriate offsetting.
197. In relation to Objective 3-5 and the associated policies 13-14 and 3-15, Waka Kotahi proposes to apply for the necessary consents to undertake remediation of contaminated land prior to commencement of the main works for the Ō2NL Project. As such the contaminated land objectives and policies have not been assessed.

Chapter 4 – Land	
Policy 4-2 (land use activities).	Objective 4-2 (Regulating potential causes of accelerated erosion)

198. As I have already identified, the Ō2NL Project involves substantial land disturbance associated with construction of the road including vegetation clearance and the potential for accelerated erosion. I concur with Waka Kotahi’s assessment¹⁴² that the objective relates to the regulation of the potential causes of accelerated erosion and requires the avoidance of increased sedimentation in water bodies, as far as reasonably practicable, or otherwise remedied or mitigated. The policy also seeks to ensure that sediment loads entering water bodies as a result of accelerated erosion are reduced to the extent required to be consistent with the water management objectives and policies for water quality set out in Chapter 5 of the One Plan. The importance of those water management objectives and policies (and associated values) is highlighted through the reports of Mr Brown and Mr Pearce. The

¹⁴¹ The application also considers route alternatives in Volume II (Folder 2 or 12), Part E Consideration of Alternatives, Pages 105 – 154.

¹⁴² Volume II (Folder 2 of 12), Assessment of Effects on the Environment, Part I Statutory Assessment, Section 65.2.3, Page 331.

importance of the policy is further articulated in Chapter 13, which I address below.

Chapter 5 – Water	
<p>Policy 5-1 (management zones and values); 5-2 (water quality); 5-3 (compliance where water quality targets are met); 5-4 (water quality targets are not met); 5-10 (point source discharge to land); 5-13 (water efficiency); 5-17 (supplementary takes); 5-22 (beds of rivers and lakes); 5-23 (Value of NS, SOS-C, SOS-A); 5-24 (Value of FCD); 5-25 (other Schedule B Values); 5-26 (essential and beneficial activities).</p>	<p>Objective 5-1 (water management values); Objective 5-2 (water quality); Objective 5-3 (water quantity and allocation); Objective 5-4 (beds of rivers and lakes).</p>

199. Chapter 5 addresses the management of freshwater in the Horizons Region, with the objectives and policies contained in Chapter 5 underpinning several key aspects of the application, including water quality targets and core allocation limits. Waka Kotahi provides an assessment of those provisions in the application.¹⁴³
200. In general, I concur with Waka Kotahi’s assessment as to objectives and policies for Chapter 5 of the RPS. As set out in Water Quality Assessment K and further addressed by Mr Brown, none of the applicable catchments that Ō2NL Project crosses meet the One Plan water quality targets. In these circumstances Policy 5-4 requires that water quality is managed so that it is enhanced. Relying on the reports of Mr Brown and Mr Farrant, the operational stormwater discharge is to be treated through a stormwater management system, and overall it will, subject to the imposition of conditions, improve water quality. However, I also consider that the imposition of performance standards, use of GDO5, new monitoring requirements, and strengthened conditions recommended by Mr Brown, Mr Farrant and Mr Pearce are essential to address the effects from sediment discharges during construction.

¹⁴³ Volume II (Folder 2 of 12), Assessment of Effects on the Environment, Part I Statutory Assessment, Section 65.2.4, Pages 331 – 335.

201. Relying on the report of Mr Williamson, I concur with Waka Kotahi that Policy 5-6 relating to groundwater is not relevant as there will be no discharge of contaminants to groundwater.
202. I concur with Waka Kotahi's assessment as to Objective 5-2 regarding water quantity and Policy 5-13 regarding the efficient use of water. As part of the Section 92 Response¹⁴⁴ Waka Kotahi undertook an assessment of Policy 5-17, concluding that:
- As set out in Appendix 4.7 to the Design and Construction Report that is Appendix Four to the 'Supporting Information and Assessment of Effects on the Environment' Report (Volume II), the supplementary allocation sought does not give rise to any of the circumstances in Policy 5-17(b) (in particular it will not increase the frequency or duration of minimum flows) and as such the proposed water take is consistent with Policy 5-17 of the One Plan.¹⁴⁵
203. However, relying on Ms Stout's report,¹⁴⁶ insufficient information has been provided to illustrate how in the circumstances, the supplementary allocation will be consistent with the restrictions in Policy 5-17b). I agree.
204. I concur with Waka Kotahi's assessment as to Objective 5-4 and policies 5-22 to 5-27¹⁴⁷ in relation to bridge crossings and that the effects assessment hierarchy has been applied. I agree that offsetting (Policy 5-25(b)) is provided as part of the proposal to meet the policy criteria. The exception is Policy 25-4 as it relates to rivers and their beds with a Schedule B value of 'Flood Control and Drainage'. This Schedule B value is relevant to all of the bridge crossings. Relying on Mr Kinley's report there is insufficient information to conclude that the effects as to flooding will be less than minor. I am of the view that consistency with this policy has not been demonstrated.

¹⁴⁴ In response to Question 8.

¹⁴⁵ Section 92 Response, 17 January 2023, Pages 5 – 6.

¹⁴⁶ Section 87F Report – Michaela Stout – Surface Water Take and Allocation, para 149.

¹⁴⁷ Volume II (Folder 2 of 12), Assessment of Effects on the Environment, Part I Statutory Assessment, Section 65.2.4.2, Pages 333 – 335.

Chapter 6 – Biodiversity & Landscape	
Policy 6-2 (Indigenous biological diversity); 6-8 (natural character); 6-9 (managing natural character); 6-10 (public access along rivers and lakes and their margins).	Objective 6-1 (Indigenous biological diversity); Objective 6-2 (Outstanding natural features and landscapes, and natural character)

205. Waka Kotahi's identification and assessment of Chapter 6 of the One Plan deals with indigenous biological diversity, landscape and historic heritage.¹⁴⁸
206. Ms Williams identifies that there are no outstanding or high natural character wetlands in the Ō2NL Project area. The Technical Assessment sets out a package of mitigation measures to provide for the restoration and rehabilitation of natural character, and having reviewed this information, Ms Williams is of the view that the development is generally appropriate and the mitigation satisfies Objective 6-2 (a)(ii), (b) and c) and Policies 6-8 and 6-9.¹⁴⁹ Ms Williams' opinion as to mitigation depends, however, on the natural character plantings occurring at 'place'. If the natural character plantings do not occur where proposed due to landowners not approving, Ms Williams confirms that there will be reduction of natural character in every catchment.
207. Mr Lambie¹⁵⁰ for Horizons and GWRC considers that there are priority areas of natural character and landscape planting occurring outside the proposed designation that are of paramount importance to mitigating the effects on wetland natural character. Mr Lambie considers that the conditions should not be subject to landowner agreement.
208. Relying on the assessments of Ms Williams, Mr Brown and Mr Lambie, and subject to imposition of conditions requiring appropriate offsetting and mitigation of biodiversity and ecological effects contributing to natural character, it is my view, that the proposal will be consistent with the relevant objectives and policies in Chapter 6.

¹⁴⁸ Volume II (Folder 2 of 12), Assessment of Effects on the Environment, Part I Statutory Assessment, Section 65.2.4.2, Pages 335 – 337.

¹⁴⁹ Section 87F- Julia Williams – Natural Character, para 27.

¹⁵⁰ Section 87F Report, James Lambie, Terrestrial Ecology, para 115.

Chapter 7 – Air	
Policy 7-1 (National Environmental Standards); 7-2 (regional standards for ambient air quality); 7-3 (discharges to air).	Objective 7-1 (ambient air quality); Objective 7-2 (fine particle PM ₁₀ levels).

209. Relying on the conclusions and suggested conditions in Mr Stacey’s section 87F Report, it is my view that the discharge of contaminants to air, primarily dust associated with the construction activities of the project, can be managed and mitigated in a manner which prevents noxious, offensive or objectionable effects beyond the boundaries of the designation and spoil sites. I, therefore, concur with Waka Kotahi¹⁵¹ and conclude that, subject to appropriate consent conditions, the proposal will meet the objectives and policies of Chapter 7.

Chapter 9 – Natural hazards	
Policy 9-1 (natural hazard management); 9-3 (new critical infrastructure); 9-4 (other types of natural hazards); 9-5 (climate change).	Objective 9-1 (Natural hazards).

210. Objective 9-1 manages the adverse effects of natural hazard events on people, property and infrastructure so that effects are avoided or mitigated. Waka Kotahi has set out an assessment of the project as to the natural hazard objective and policies.¹⁵² The flood hazard risks have been assessed in Technical Assessment F– Hydrology and Flooding which concludes that the adverse effects of the project on the hydrology and flooding will be less than minor. Mr Kinley on behalf of Horizons and GWRC considers the assessment of the suite of storm events, the thresholds used to identify effects and whether the design meets the proposed thresholds, and the assessment of freeboard, scour and other matters, lacks the necessary technical information in support. For this reason, Mr Kinley is not confident that the effects will be less than minor.

¹⁵¹ Volume II (Folder 2 of 12), Assessment of effects on the environment, Part 1 Statutory Assessment, Section 65.2.6, Page 337.

¹⁵² Volume II (Folder 2 of 12), Assessment of effects on the environment, Part 1 Statutory Assessment, Section 65.2.7, Page 337-338.

Further information is required to determine the potential effects and how the activity will meet the objectives and policies of the plans.¹⁵³

211. Policy 9-3 for new critical infrastructure states:

The placement of new critical infrastructure in an area likely to be inundated by a 0.5% AEP (1 in 200 year) flood event² (including floodways mapped in Schedule J), or in an area likely to be adversely affected by another type of natural hazard[^], must be avoided, unless there is satisfactory evidence to show that the critical infrastructure:

- (a) will not be adversely affected by floodwaters or another type of natural hazard[^];
- (b) will not cause any adverse effects[^] on the environment[^] in the event of a flood or another type of natural hazard[^];
- (c) is unlikely to cause a significant increase in the scale or intensity of natural hazard[^] events; and
- (d) cannot reasonably be located in an alternative location.

212. For the reasons explained in Mr Kinley's evidence, it is my view that Ō2NL Project is not consistent with Policy 9-3 b. Mr Kinley is concerned that there is not yet satisfactory evidence to show that there will not be adverse effects on the environment in the event of a flood.

213. I concur with Waka Kotahi's assessment in relation to climate change with regard to Policy 9-5 in that the Ō2NL Project has been modelled and designed to account for this matter.

P. OPERATIVE REGIONAL PLAN (ONE PLAN)

Regional Plan – Policies

214. The following is an assessment of the proposal against the Objectives and Policies of the Regional Plan being Part II of the One Plan. Waka

¹⁵³ Section 87F Report, Peter Kinley – Hydrology and Flooding, para 23-25, para 15-16.

Kotahi has identified relevant Objectives and Policies within the Application. I have provided commentary on those which require further analysis below.

Chapter 12 – General Objectives and Policies	
12-4 (Consent conditions); 12-5 (Consent durations).	Objectives 12-1 (Resource management in the Region); 12-2 (Consent duration, review and enforcement).

215. I generally concur with the assessment in the application¹⁵⁴ as to consent duration and subject to recommended amendments to the conditions, that the Ō2NL Project is consistent with the objectives and policies in this chapter. I address the details of the duration and the recommended conditions in paragraph 341 onwards of my report.

Chapter 13 – Land	
Policy 13-1 (vegetation clearance, land disturbance); 13-2 (consent decision making for vegetation clearance, land disturbance); 13-3 (regional rules for activities affecting indigenous biological diversity); 13-4 (consent decision making for activities in rare habitats, threatened habitats and at-risk habitats); 13-5 (criteria).	Objectives 13-1 (vegetation clearance, land disturbance); 13-2 (indigenous biological diversity).

216. Objective 13-1 regulates activities to manage erosion and sedimentation in water bodies, and specifically requires that the potential increased sedimentation in water bodies as a result of human activity is avoided as far as reasonably practicable, or otherwise mitigated. The proposal involves a significant volume of earthworks and removal of vegetation. Waka Kotahi has prepared a draft ESCP¹⁵⁵ to manage the construction effects and concludes the proposal is consistent with Objective 13-1 and Policy 13-2. Policy 13-2 is relevant to managing construction effects by

¹⁵⁴ Volume II (Folder 2 of 12), Assessment of Effects on the environment – Part I – Statutory Assessment, Section 65.3.1, Pages 338 – 339.

¹⁵⁵ Volume II (Folder 4 of 12), Assessment of Effects on the environment continued – Design and Construction Report, Appendix 4.3.3.

requiring resource consents for activities adjacent to some water bodies and large scale land disturbance (here, large scale earthworks) within 5 metres of streams and rivers.

217. Mr Pearce is of the view that while sediment and control measures are proposed through a comprehensive management plan structure, the use of both Waka Kotahi guidelines and GDO5 in managing erosion and sediment control is not considered best practice. Mr Pearce considers GDO5 to be industry best practice and is not comfortable with the reasons set out in the ESC – Technical Assessment for use of the Waka Kotahi Guidelines. Mr Pearce notes that Waka Kotahi Guidelines are not the same standard of GDO5 and are stated to be a minimum requirement. Mr Pearce is of the view that the conditions should require the GDO5 requirements to be met with conditions further improved to ensure that construction and implementation works sufficiently managed adverse effects on water quality (including performance standards).
218. Subject to the additional matters identified by Mr Brown and Mr Pearce regarding amendments to the conditions to manage sedimentation effects, I consider that the proposal will be consistent with Objective 13-1 and Policies 13-1 and 13-2.
219. Objective 13-2 requires the regulation of “resource use activities to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna or to maintain indigenous biological diversity, including enhancement where appropriate”.
220. Mr Lambie’s evidence agrees with the assessment of ecological values and statutory significance of the habitat types affected by the Ō2NL Project. I note there is permanent loss of areas of significant indigenous vegetation and significant habitats of indigenous fauna, meaning that the second limb of Objective 13-2 is to be considered.
221. Waka Kotahi has identified a hierarchical approach (avoid, remedy, mitigate, and offset) to managing the biodiversity loss where the effects are more than minor in accordance with Policy 13-4(b)¹⁵⁶ and has

¹⁵⁶ Volume II (Folder 2 of 12), Assessment of Effects on the environment – Part I – Statutory Assessment, Section 65.3.2.2, Page 340.

adopted that approach in the application and technical assessments.¹⁵⁷ I agree that this policy enables any more than minor effects that cannot be avoided, remedied or mitigated, to be offset to result in a net indigenous gain, subject to the offsetting limits set out in Policy 13-4(d).

222. Policy 13-4(d) provides as follows:

An offset assessed in accordance with b(iii) or (c)(iv) must:

- (i) provide for a net indigenous biological diversity gain within the same habitat type, or where that habitat is not an area of significant indigenous vegetation or a significant habitat of indigenous fauna, provide for that gain in a rare habitat or threatened habitat type, and
- (ii) reasonably demonstrate that a net indigenous biological diversity gain has been achieved using methodology that is appropriate and commensurate to the scale and intensity of the residual adverse effect, and
- (iii) generally be in the same ecologically relevant locality as the affected habitat, and
- (iv) not be allowed where inappropriate for the ecosystem or habitat type by reason of its rarity, vulnerability or irreplaceability, and
- (v) have a significant likelihood of being achieved and maintained in the long term and preferably in perpetuity, and
- (vi) achieve conservation outcomes above and beyond that which would have been achieved if the offset had not taken place.

223. Waka Kotahi has set out in detail the offset and compensation package proposed as part of the Ō2NL Project in Technical Assessment J. Mr Lambie is generally in agreement with the input metrics used by the

¹⁵⁷ Volume IV (Folder 10 of 12) - Technical Assessments continued, J - Terrestrial Ecology.

Applicant and considers that the modelling undertaken accurately captures the key elements of biodiversity concern.

224. Mr Lambie agrees that Waka Kotahi has demonstrated a sequential approach to its approach to the effects hierarchy before considering the management of residual effects through offsetting (and compensation).¹⁵⁸ Mr Lambie confirms that Waka Kotahi explicitly avoided areas of high value forests, and has adopted checks and balances that avoid, remedy, or mitigate effects on rare or vulnerable flora and fauna. Mr Lambie has considered the limits to offsetting under the One Plan in Policy 13-4; and agrees the offsetting proposal is consistent with them, including the delivery of an indigenous biological diversity gain. Further, Mr Lambie notes that the offsets address significant habitats and the residual effects on areas where effects are greater than “low” which goes beyond the requirements of Policy 13-4.
225. Overall, Mr Lambie is of the view that the offsetting and compensation proposals are sound and meet the policy expectations of the One Plan.
226. Relying on the evidence of Mr Lambie, and the recommended amendments to conditions, it is my view that the Project is consistent with Policy 13-4.
227. Finally, the application states:

In any event, it is noted that the Project will allow for the construction of nationally significant infrastructure and therefore RPS Policy 3-3 and the support it provides the Project has an over-arching influence on indigenous biodiversity matters.

228. I disagree that RPS Policy 3-3 has an overarching influence on indigenous biodiversity matters. Biodiversity matters as described in Policy 13 -4 give effect to Chapter 6 of the RPS. In my view, there is no hierarchy between the RPS chapters or an overarching influence, from Chapter 3 of the One Plan.

¹⁵⁸ Section 87F – James Lambie – Terrestrial Ecology, paras 80-82.

Chapter 14 – Discharges (land and water)

Policy 14-1 (discharge to water); 14-2 (discharge to land); 14-3 (industry-based standards); 14-4 (options for discharges to surface water and land; 14-8 (monitoring requirements); 14-9 (decision making requirements from the NPSFM).

Objective 14-1 (water quality)

229. The objectives and policies within Chapter 14 are relevant to the Project. Objective 14-1 outlines the management of the effect of discharges on surface and ground water to provide for Schedule B values, provides for the objectives and policies of Chapter 5 of the One Plan, and seeks to avoid, remedy or mitigate the effects of any discharge to water. There are eight (8) policies in support of this objective.
230. Policy 14-1 is of particular relevance as it identifies the matters to be considered when processing applications for the discharge of contaminants to water, including the objectives of Chapter 5 and associated policies, which I have already discussed in this report. The Ō2NL Project will result in stormwater discharges during construction and discharges on an ongoing basis from the operation of the road.
231. Policy 14-1 requires consideration of the relevant objectives and policies of Chapter 5 when making a decision or setting consent conditions for the discharge of contaminants to water. I have dealt with this earlier in my report, and I agree with Waka Kotahi’s identification of the relevant objectives and policies under Chapter 14. Therefore, I will not repeat my earlier analysis within this section.

Chapter 15 - Air

Policy 15-2 (consent decision making).

Objective 15-1 (air quality).

232. Objective 15-1 outlines matters relevant to the management of the Region’s air resources to enable their maintenance or enhancement. Waka Kotahi proposes a Construction Air Quality Management Plan to manage the construction effects and concludes the proposal is

consistent with Objective 15-1 and Policy 15-2, subject to the implementation of management techniques regarding dust. With the amended recommended conditions proposed by Mr Stacey, I consider the proposed activities to be consistent with Objective 15-1.

Chapter 16 – Takes, uses and diversions of water, and bores	
Policy 16-1 (takes and uses of surface water and groundwater); 16-3 (diversions and drainage).	Objective 16-1 (takes, uses and diversions of water).

233. Objective 16-1 outlines matters relevant to takes, uses and diversions of water. The Ō2NL Project includes the construction of permanent diversion channels and stream diversion works to maintain stormwater flows through or around the alignment embankment and associated works areas.
234. Policy 16-1(b) seeks to enable non-consumptive uses of water including the recycling of water. Waka Kotahi identifies where groundwater is encountered during land disturbance activities, incidental groundwater takes for the purposes of construction, and records that dewatering is unlikely to be required. I understand Mr Williamson to agree, but considers specific conditions are required to address this activity.¹⁵⁹ Relying on Mr Williamson’s report, and subject to the imposition of conditions he recommends, I am of the view that the Project will not have an adverse effect on other lawful activities including existing consented surface water takes and groundwater bores.
235. Policy 16-1c) also require consideration of those relevant objectives and policies of Chapters 2, 3, 5, 6, 9 and 12 of the PNRP, specifically and in relation to water takes. I have addressed those matters above.
236. Policy 16-3 requires the Applicant to manage the effects on rare, threatened or at-risk habitats, and I have discussed this aspect of the application above. The Applicant sets out that as stream loss cannot be avoided or fully mitigated, stream creation, through diversions, and riparian restoration and enhancement is proposed to offset identified

¹⁵⁹ Section 87F Report, Jon Williamson –Groundwater, para 30-41.

residual effects.¹⁶⁰ Mr Brown agrees that the offsetting principles of the “Biodiversity offsetting under the RMA” guidance document are met. However, Mr Brown considers that there is a need to continue to recalculate the SEV scores to check that what is predicted to occur does occur. This will address issues of permanence, but also assist in managing uncertainty around the offsetting sites.¹⁶¹ Mr Brown has also recommended an Offsetting Plan be provided to the Regional Councils for certification to ensure that the offsetting is delivered in the place and manner that provide the necessary outcomes.

237. Subject to recommendations from Mr Brown, Ms Stout and Mr Williamson, I concur that the proposal is consistent with Chapter 16.

Chapter 17 – Artificial Watercourses, beds of rivers and lakes, and damming	
Policy 17-1 (activities in, on, under or over the beds of rivers and lakes).	Objective 17-1 (structures and activities).

238. The proposal intersects with several existing waterways and includes construction of the Ōhau River Bridge, Kuku Stream Bridge, Waikawa Stream bridge, Manakau Stream Bridge, Waiauti Stream Bridge and culverts. The Applicant identifies and assesses the objectives and policies for these activities,¹⁶² and I generally concur with that assessment.
239. With the imposition of management plans including the ESCP and Ecological Management Plan (“**EMP**”) as per the conditions, I consider that the proposal will be consistent with Chapter 17.

Summary of the One Plan

240. In summary, subject to the imposition of proposed conditions and the recommendations of the Regional Council experts, I generally agree that

¹⁶⁰ Volume IV (Folder 10 of 12) - Technical Assessments continued, K - Freshwater Ecology.

¹⁶¹ Section 87F Report, Logan Brown, Water Quality and Aquatic Ecology, para 132-145.

¹⁶² Volume II (Folder 2 of 12), Assessment of Effects on the Environment, Part I Statutory Assessment, Section 65.3.6, Pages 343 – 345.

the potential adverse effects of the Ō2NL Project are avoided, remedied or mitigated in a manner that is consistent with many of the objectives and policies of the One Plan. However, I have also identified a number of objectives and policies in relation to tangata whenua, water quality, and flooding that require further information in order to complete my assessment of these matters.

GWRC Regional Policy Statement (RPS)

- 241. The GWRC’s Regional Policy Statement became fully operative on 24 April 2013. Proposed RPS Plan Change 1 was notified on the 19 August 2022 with the submission period closing on 14 Oct 2022.
- 242. Again I have assessed the application against what I consider to be the relevant policies of the GWRC RPS, with those that require specific comment set out below. For the most part these are included in Waka Kotahi’s assessment¹⁶³ and so are not repeated in full.

Chapter 3.1 – Air Quality	
	<p>Objective 1 (Discharges of odour, smoke and dust to air do not adversely affect amenity values and people’s wellbeing).</p> <p>Objective 2 (Human health is protected from unacceptable levels of fine particulate matter)</p>

- 243. Relying on the conclusions and suggested conditions in Mr Stacey’s section 87F Report, it is my view that the discharge of contaminants to air, primarily dust associated with the construction activities of the project, can be managed and mitigated in a manner which prevents noxious, offensive or objectionable effects beyond the boundaries of the designation and spoil sites. I, therefore, concur with Waka Kotahi¹⁶⁴ and conclude that, subject to appropriate consent conditions, the Ō2NL Project will meet the objectives in Chapter 3.1.

¹⁶³ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I Statutory Assessment, Section 66.2, Pages 346 – 350 and Appendix two.

¹⁶⁴ Volume II (Folder 2 of 12), Assessment of effects on the environment, Part 1 Statutory Assessment, Section 65.2.6, Page 337.

Chapter 3.3 – Energy, infrastructure, and waste	
Policy 39: (Recognising the benefits from renewable energy and regionally significant infrastructure – consideration) Policy 57: (Integrating land use and transportation consideration)	Objective 10 (The social, economic, cultural and environmental, benefits of regionally significant infrastructure are recognised and protected).

244. These objectives and policies relate to the benefits of regional significant infrastructure and its protection from incompatible subdivision use and development. I concur with Waka Kotahi’s assessment.

Chapter 3.4 – Freshwater	
Policy 40: (Safeguarding aquatic ecosystem health in water bodies – consideration), Policy 41: (Minimising the effects of earthworks and vegetation disturbance – consideration), Policy 42: Minimising contamination in stormwater from development – consideration), Policy 43: (Protecting aquatic ecological function of water bodies – consideration), Policy 44: (Managing water takes to ensure efficient use – consideration), Policy 45: (Using water efficiently – consideration)	Objective 12 (The quantity and quality of fresh water) Objective 13 (The region’s rivers, lakes and wetlands support healthy functioning ecosystems) Objective 14 (Fresh water available for use and development is allocated and used efficiently)

245. Waka Kotahi provides reasons for the project being consistent with Policies 40 - 43. These include:

- (a) The health of aquatic ecosystems in the Ō2NL Project area will be maintained during construction and improved over the long term, as set out in Freshwater Ecology - Technical Assessment K (noting that there are no significant waterways crossed by the Project in the GWRC area); and
- (b) Best practice erosion and sediment control measures will be employed to minimise silt and sediment discharges to the fullest extent practicable; and

- (c) A best practice treatment train approach will be implemented to reduce and treat stormwater runoff from the Ō2NL Project; and
- (d) Riparian margin function will be enhanced through reinstatement of riparian habitat, natural flows and fish passage through new culverts will be maintained, and where native wetland plants and habitat is unavoidably affected a comprehensive offset package is implemented to achieve a net gain of ecological function.¹⁶⁵

246. I generally concur with the above reasons, however, whether (b) and (c) justifies the discharges consistent with policies 40 and 41 is subject to the recommendations of Mr Pearce, Mr Farrant and Mr Brown, including use of GDO5, and the imposition of standards and monitoring requirements.

247. In addition, Mr Brown notes that the effects of stream habitat loss as a result of reclamation cannot be fully avoided, remedied or mitigated, as that location is either filled in or enclosed in a pipe, although the construction of diversion channels at some locations will act to minimise the loss of stream habitat. As a result, offsetting of these residual effects is required, and should be undertaken in a manner that is consistent with Schedules G1 and G2 of the PNRP.

248. Subject to Mr Thompson’s concerns about “whether the amounts sought are justified once other potential sources of construction water have been acquired (i.e. as a “top up””,¹⁶⁶ I consider the objectives and policies as to allocation and efficiency to be met.

Chapter 3.6 – Indigenous ecosystems	
Policy 47: (Managing effects on indigenous ecosystems and habitats with significant indigenous biodiversity values – consideration),	Objective 16 (Indigenous ecosystems and habitats with significant biodiversity values are maintained and restored to a healthy functioning state.)

¹⁶⁵ Volume II (Folder 2 of 12), Assessment of effects on the environment, Part 1 Statutory Assessment, Section 66.3, Page 347.

¹⁶⁶ Section 87F Report, Michael Thompson, Water Take and Allocation, para 22.

249. I concur with the assessment in the application that the Ō2NL Project route selection has primary avoided areas of significant biodiversity.
250. While the Waitohu Stream is assessed in Table 16 of the RPS (and also Schedule F of the PNRP) as a river with significant indigenous ecosystems, Mr Brown agrees with Waka Kotahi's assessment that the permanently flowing streams in the Waitohu catchment that are to be reclaimed have a low ecological value.¹⁶⁷ The loss of 850m of stream length in this catchment is proposed to be offset through riparian planting and fencing within the Waiauti and Kuku Stream catchments.¹⁶⁸
251. While the Terrestrial Ecology Assessment J assesses and calculates the consequential offset for the loss of wetlands identified in the Ō2NL Project, Mr Lambie considers that a further assessment of the Paruāuku swamp for vegetation type is required and that the offset needs to be recalculated in order to be in line with the effects hierarchy.¹⁶⁹ I address this matter further in my assessment of the PNRP below.
252. Noting my assessment as to wetlands under the NPS-FM and the recommendations from Mr Lambie, I am of the view that the proposal, in an overall sense, is consistent with objective 16 and policy 47.

Chapter 3.8 – Natural Hazards	
Policy 51: (Minimising the risks and consequences of natural hazards – consideration), Policy 52: (Minimising adverse effects of hazard mitigation measures – consideration)	Objective 19 (The risks and consequences to people, communities, their businesses, property and infrastructure from natural hazards and climate change effects are reduced) Objective 20 (Hazard mitigation measures, structural works and other activities do not increase the risk and consequences of natural hazard events.)

¹⁶⁷ Section 87F Report – Logan Brown – Water Quality and Aquatic Ecology, para 35.
¹⁶⁸ Volume IV (Folder 10 of 12) - Technical Assessments continued, K - Freshwater Ecology.
¹⁶⁹ Section 87F Report – James Lambie – Terrestrial Ecology, para 45-46, 50 and 123.

253. I also agree with the assessment in the application that the principal natural hazard that could affect the project is flooding, and specifically more frequent and serve flood events brought on by climate change.¹⁷⁰
254. As I set out above, Mr Kinley on behalf of Horizons and GWRC has considered the selection of storm events by Waka Kotahi, the thresholds used by Waka Kotahi to identify adverse effects, whether the design can meet the proposed thresholds, and the proposed design when having regard to freeboard, scour and other matters. Mr Kinley concludes that the hydrology and flooding conclusions in the application lack sufficient technical information. Mr Kinley considers there is insufficient detail to assess the magnitude of potential effects, which, in his opinion, are likely to be more than minor.¹⁷¹
255. Based on that assessment I am unable to conclude that the Project is consistent with the natural hazards objectives and policies of the GWRC RPS.

Chapter 3.10 – Resource Management with tangata whenua	
Policy 49: (Recognising and providing for matters of significance to tangata whenua – consideration)	Objective 25 (The concept of kaitiakitanga is integrated into the sustainable management of the Wellington region’s natural and physical resources.) Objective 26 (Mauri is sustained, particularly in relation to coastal and fresh waters.) Objective 27 (Mahinga kai and natural resources used for customary purposes, are maintained and enhanced, and these resources are healthy and accessible to tangata whenua), Objective 28 (The cultural relationship of Māori with their ancestral lands, water, sites, wāhi tapu and other taonga is maintained.)

256. For similar reasons to those set out in my assessment of Chapter 2 of the One Plan, including through the Iwi Project Partners participation in

¹⁷⁰ Volume II (Folder 2 of 12), Assessment of effects on the environment, Part I Statutory Assessment, Section 66.7, Page 349.

¹⁷¹ Section 87F Report, Peter Kinley – Hydrology and Flooding, para 15-16.

the design and ongoing implementation of the Project, it is my view, subject to resolution of conditions (as below), the proposal is generally consistent with these objectives and policy of the GWRC RPS.

257. As identified above, the Iwi Project Partners and others as submitters, while supporting the Ō2NL Project, consider the proposed conditions as lodged are inadequate and therefore the residual cultural effects to the Project have not been mitigated. I note that Te Rūnanga o Toa Rangatira and Ngā Hāpu o Ōtaki were notified of the application, and Ngā Hāpu o Ōtaki, who are one of the Iwi Project Partners, submitted on the application. My view as to the consistency of the Ō2NL Project with these objectives and policies is therefore subject to the resolution of the matters identified within these submissions.

Chapter 3.11– Soils and Minerals	
Policy 41: (Minimising the effects of earthworks and vegetation disturbance – consideration)	Objective 29 Land management practices do not accelerate soil erosion.
Policy 59: (Retaining highly productive agricultural land (Class I and II land) – consideration)	Objective 30 (Soils maintain those desirable physical, chemical and biological characteristics that enable them to retain their ecosystem function and range of uses.)

258. I concur with the Applicants assessment that the project alignment does not traverse Class I and II soils within the Wellington region.
259. As to Objective 29 and Policy 41, the Applicant’s statement that, “*The erosion and sediment control procedures and measures to be implemented on the Project will ensure consistency with this objective.*”, is, in my view, contingent on meeting GDO5 and the ESC requirements recommended by Mr Pearce for Horizons and GWRC.

GWRC Regional Policy Statement – Plan Change 1 (GWRC RPS PC1)

260. I concur with Waka Kotahi’s assessment that the key topics of the GWRC RPS PC1 are;

- (a) Lack of urban development capacity and implementation of the NPS-UD and Wellington Regional Growth Framework;
- (b) Degradation of freshwater and partial implementation of the NPS-FM;
- (c) Loss and degradation of indigenous biodiversity including regional policy to implement central government strategy and draft RMA national policy direction; and
- (d) The impacts of climate change including regional policy to complement central government policy direction.¹⁷²

261. The application briefly assesses the proposal against the RPS PC 1 under the heading Chapter 3.1A Climate Change, Chapter 3.3 Energy Infrastructure and Waste, Chapter 3.4 Freshwater and Chapter 3.6 Indigenous Ecosystems. In general the application considers that the matters have already been addressed under the operative RPS and NPS-FM assessment. The application further states that as the, *“RPS PC1 is in the early stages of the RMA Schedule 1 process, and could thus be subject to significant change, little statutory weight can be given to its provisions at this time”*. While it is my understanding that the approach is consistent with current case law, and I generally agree with the assessment, I highlight a key point of difference below.

262. Policies 40 and 44, are proposed to be amended in the following manner:

Policy 40: ~~Maintaining~~ Protecting and enhancing the health and well-being of water bodies and freshwater ecosystems ~~aquatic ecosystem health in water bodies~~ – consideration.

Policy 44: Managing water takes and use to give effect to Te Mana o te Wai ~~ensure efficient use~~ – consideration.

263. These amendments align with the direction of the NPS-FM and strengthen the policy considerations as to the well-being of water bodies

¹⁷² Volume II (Folder 2 of 12), Assessment of effects on the environment, Part 1 Statutory Assessment, Section 66.10, Pages 349 - 350.

and expand consideration of water takes to both take and use in line with Te Mana o te Wai. Relying on the reports as to terrestrial ecology, aquatic ecology, surface water takes and operational stormwater as they relate to GWRC matters, I consider that the proposal is generally consistent with those policies.

GWRC Proposed Natural Resources Plan (PNRP)

264. Decisions on the PNRP were publicly notified on 31 July 2019. Appeals to the PNRP have been settled by consent orders, clause 16 amendments and additions or changes required by national direction. The current version of the PNRP is the Appeals Version – final 2022. GWRC is currently awaiting any amendments and approval from the Minister of Conservation under clause 19 of the First Schedule of the RMA as to the Regional Coastal Plan component of the PNRP.
265. The application states that:

Only a small portion of the overall Project (roughly 6km) is located within the GWRC area. That part of the Project includes no significant waterway crossings or hazard areas, nor any areas of outstanding natural character. As a result, the range of objectives and policies that are relevant to assessment of the Project is reduced when compared to the Horizons One Plan assessment set out above.¹⁷³

Ki uta ki Tai: mountains to the sea	
Policy P2: Cross-boundary matters	Objective O1, Objective O2, Objective O3, Objective O4
Policy P3: Precautionary approach	
Policy P5: Synchronised expiry and review dates	

266. I generally concur with Waka Kotahi’s assessment of these objectives, particularly in regard to the effects management as it relates to freshwater ecology and water quality. In relation to the precautionary approach, while I agree it is not a major factor in relation to the Ō2NL

¹⁷³ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I– Statutory Assessment, Section 67.1, Page 351.

Project as a whole, my opinion is subject to the information requirements noted in the various technical section 87F reports, including the advice regarding the imprecise and uncertain nature of the relationship between abstraction and ecosystem impact within the Waitohu Stream as noted by Mr Thompson.¹⁷⁴ In relation to Policy P5 I have addressed that in section N, “Term”, of my report below.

Beneficial use and development	
Policy P6: Uses of land and water	Objective O5, Objective O6, Objective O9, Objective O10
Policy P7: Beneficial activities	
Policy P10: Water storage	
Policy P13: Providing for Regionally Significant Infrastructure and renewable electricity generation activities	
Policy P15: Incompatible activities adjacent to Regionally Significant Infrastructure, renewable electricity generation activities and significant mineral resources	

267. These provisions recognise and enable the benefits of development and the assessments in the application set out the social economic, cultural and environmental positive effects of the Ō2NL Project. In particular, as related to the provisions for which regional consents are required, the Ō2NL Project includes restoring natural character, aquatic ecosystem health, and sites with significant indigenous biodiversity values (P7(a), and the retirement, fencing and planting and management of riparian margins (P7 (f)). I agree with the identification and assessment of these policies and objectives.

Māori relationships	
Policy P18: Mauri	Objective O12, Objective O13,
Policy P20: Māori values	
Policy P21: Exercise of kaitiakitanga	

¹⁷⁴ Section 87F Report – Michael Thompson – Water Take and Allocation, para 20, 84.

268. As with my assessment of the GWRC RPS, it is my view that the proposal is generally consistent with these objectives and policies of the PNRP. However, while the Iwi Project Partners support the Ō2NL Project, as submitters they are concerned that the conditions are inadequate and therefore the residual cultural effects to the Project have not been mitigated. In my view, these matters should be resolved in order for the Ō2NL Project to be consistent with the objectives and policies.
269. The Waitohu Stream is within the rohe of Ngā Hāpu o Ōtaki which has a number of sites of significance listed in Schedule C1 of the PNRP. In addition, the O-te-pua Wetland is also listed in Schedule C1 as a site of significance to Ngā Hāpu o Ōtaki, with the following significant values: papa kāinga, mahinga kai, puna raranga, puna rongoā, puna uku and wai ora. Policy P21 states that activities in sites with significant mana whenua values listed in Schedule C (mana whenua) shall be managed in accordance with tikanga and kaupapa Māori as exercised by mana whenua.

Natural character, form and function	
<p>Policy P23: Identification of outstanding/high natural character and outstanding natural features and landscapes</p> <p>Policy P24: Preserving and protecting natural character from inappropriate use and development</p>	Objective O14

270. I agree with the assessment of Waka Kotahi regarding these objectives and policies.
271. In relation to preserving the natural character of areas and protecting it from inappropriate use and development, Policy 24(e) of the PNRP states that this should be done by:

outside the coastal environment, avoiding, remedying or mitigating other adverse effects of activities on the natural character of wetlands, rivers, lakes and their margins that are not addressed under (c) or (d) of Policy P24.

272. The Ō2NL Project alignment avoids areas of outstanding/high natural character and outstanding natural features and landscapes in the Greater Wellington Region.
273. In the Greater Wellington region the O-te-pua Wetland is affected by the alignment from Chainage CH33,350 – 33,700. Ms Williams confirms that natural character planting is proposed¹⁷⁵ and I conclude that the Ō2NL Project has avoided, remedied or mitigated the effects in line with the policy. I note Ms Williams' concern that the natural character mitigation is presently subject to "landowner approval". In her view, without the mitigation, natural character will be adversely impacted across each of the catchments. My opinion as to whether the Ō2NL Project has mitigated the effects in line with Policy 24(e) is therefore dependent on the delivery of the natural character planting identified in the application, and amendments to conditions have been proposed, in line with the recommendations of Ms Williams. I note also that further amendments may be sought by Ngā Hāpu o Ōtaki in accordance with Policy P21, as referred to above.

Natural hazards	
Policy P25: High hazard areas	Objective O15, Objective 16
Policy P26: Diversion of flood waters in a floodplain	
Policy P27: Hazard mitigation measures	

274. The one aspect of the assessment by Waka Kotahi that I do not agree with is Policy P26. Waka Kotahi suggests that any increase in hazard risk or residual hazard risk in other areas as a result of the diversion of flood waters is avoided or mitigated by the Ō2NL Project. I take a similar view as to Objective 15 to which this policy relates. As identified above, based on Mr Kinley's report, there is insufficient information in the technical assessments to be able to reach a firm conclusion as to the scale of effect, and that this stage, Mr Kinley's opinion is that the effects are likely to be more than minor.

¹⁷⁵ Volume VI (Folder 10 of 12), Technical Assessment J – Terrestrial Ecology, Para 14 (j).

Water Quality	
	Objective O17, Objective 18

275. Waka Kotahi states that these objectives seek the water quality is maintained or improved to meet contact recreation standards and be suitable for Māori customary use, and that the proposed stormwater treatment will improve the water quality in the Waitohu catchment and its tributaries in line with the objectives.¹⁷⁶ While this section of road is new, and as noted by Waka Kotahi, the project will transfer traffic from the existing SH1 alignment to the new highway which will incorporate extensive stormwater treatment.
276. As with my assessment under the One Plan, I rely on the reports of Mr Brown and Mr Farrant, including recommendations as to oversight of detailed design and management plans, that the operational stormwater discharge once treated through the proposed stormwater management approach, will improve water quality. This includes the recommendation of Mr Farrant regarding the Stormwater Operation and Maintenance Plan, and the provision of additional information with detailed design.
277. Regarding sediment, the Waitohu Stream does not meet the objective for water clarity. I note that the standards, and conditions recommended by Mr Brown and Mr Pearce are essential to address the effects from sediment discharges during construction. However, while the proposed conditions will minimise the sediment discharges, and Mr Brown has noted that further information is required, this aspect of the Project does not appear to be consistent with the objectives in O18.

Biodiversity, aquatic ecosystem health and mahinga kai and riparian management and activities in the beds of lakes and rivers	
Policy P30: Biodiversity, aquatic ecosystem health and mahinga kai	Objective O19, Objective 21 Objective 22, Objective 23
Policy P31: Adverse effects on biodiversity, aquatic ecosystem health, and mahinga kai	
Policy P32: Fish passage	

¹⁷⁶ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part D – Statutory Assessment, Section 67.7, Page 353.

Biodiversity, aquatic ecosystem health and mahinga kai and riparian management and activities in the beds of lakes and rivers

Policy P33: Restoring fish passage	
Policy P34: Values of wetlands	
Policy P35: Restoration of wetlands	
Policy P109: Management of riparian margins	
Policy P110: Loss of extent and values of the beds of lakes and rivers, and natural wetlands	

278. Similar to my assessment of the comparative provisions in the One Plan, the Applicant has set out in detail the offset and compensation package proposed as part of the Ō2NL Project for terrestrial and aquatic effects. Mr Lambie and Mr Brown agree with those assessments, including that Waka Kotahi has demonstrated a sequential approach to the effects hierarchy of avoid, remedy, and mitigate, before considering the management of residual effects through offsetting (and compensation).
279. Further, both Mr Lambie and Mr Brown are in general agreement that the offsetting proposal is appropriate, subject to imposition of conditions which address residual uncertainty over the perpetuity of the offsets. I note Mr Lambie’s advice that O-te-pua Wetland (referred to as Paruauku Swamp in Waka Kotahi’s technical ecological assessment) does not overlap with Paruauku Swamp remnants affected by the Ō2NL Project, and therefore Policy P49 regarding offsetting of adverse effects in sites of significance for mana whenua (and therefore Schedule G4) is not engaged. I have relied on these recommendations.
280. As addressed above, Mr Lambie considers that for the Paruauku Swamp, a further refined assessment of the wetland for vegetation type is required and that the offset needs to be recalculated in order to be consistent with the effects hierarchy¹⁷⁷ as it relates to Schedule G1 and G2 of the PNRP. I agree.

¹⁷⁷ Section 87F Report – James Lambie – Terrestrial Ecology, para 45-46, 50 and 123.

281. I note that the proposed offsetting for the Paruauku Swamp, once it is unavoidably lost, is in the Te Ripo o Hinemata wetland in the Horizons Region. When assessing this matter, I understand that a greater indigenous biodiversity net benefit is obtained within the Te Ripo o Hinemata wetland and that it is geographically appropriate when considering offsetting principles. Further, when considering the policies of the PNRP, I understand from Mr Lambie that the offset still occurs in the same ecological district. A similar approach is taken by Mr Brown when considering the requirements of Schedules G1 and G2 of the PNRP in the context of stream offsetting for the Waiauti and Kuku Streams, where offsetting (while technically outside the Greater Wellington region) is focused on particular catchments where the length of stream can be maximised providing the maximum ecological benefit.
282. Finally, I concur with Waka Kotahi that the exceptions provided by Policy 110 apply to the Ō2NL Project. In summary, these are described as follows:
- (a) the activity, including any reclamation and drainage, is necessary for the construction or upgrade of specified infrastructure, and
 - (b) the specified infrastructure will provide significant national or regional benefits; and
 - (c) there is a functional need for the specified infrastructure in that location.

Air Quality	
Policy P55: Managing ambient air quality	Objective O30, Objective 32
Policy P58: Managing air amenity	Objective 28

283. As per my GWRC RPS assessment above, relying on the conclusions and suggested conditions in Mr Stacey's section 87F Report, I conclude that, subject to appropriate consent conditions, the proposal will meet the objectives and policies as to air quality for the PNRP.

Soils and Land use	
Policy P107: Land use activities, erosion and associated discharges	Objective O33, Objective 34

284. I concur that Objective O33 and O34 are relevant to the application.
285. However, I have added Policy 107 which includes a requirement to use measures to:
- (a) minimise the risk of accelerated soil erosion;
 - (b) control silt and sediment runoff, and
 - (c) ensure the site is stabilised and vegetation cover is restored.¹⁷⁸
286. Subject to the adoption of the GDO5 as recommended by Mr Pearce, and with amendments to the conditions from Mr Pearce and Mr Brown, the proposal is in my view consistent with this policy.

Discharges to land and water	
Policy P66: Minimising discharges to water or land	Objective O36, Objective 37
Policy P68: Discharges to land	
Policy P69: Promoting discharges to land	
Policy P83: Minimising adverse effects of stormwater discharges	
Policy P84: Managing land use impacts on stormwater	
Policy P99: Discharges from contaminated land	
Policy P100: Discharges of hazardous substances	

287. I agree with the analysis of the objectives and policies as to land based stormwater treatment prior to discharge, erosion and sediment control, and measures to prevent discharge of hazardous substances.¹⁷⁹ I rely

¹⁷⁸ Natural Resource s Plan for Wellington Region – Appeals Version Final 2022- Page 111.

¹⁷⁹ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part D – Statutory Assessment, Section 67.12, Page 355.

on the recommendations of Mr Farrant in my assessment of these provisions. I have identified Policies P66 and P68, and in particular P83 and P84 which includes discharges from a new section of state highway as also being relevant, and subject to Mr Farrant's recommendations for consent conditions and Mr Brown's request for further information regarding discharges, I consider the Project to align with those policies.

Contaminated Land	
Policy P68: Discharges to land	Objective O41, Objective 42
Policy P99: Discharges from contaminated land	
Policy P100: Discharges of hazardous substances	

288. Any resource consents under the NESCS and any regional consents for contaminated land are proposed to be applied for at a later date after further investigation. I note the recommendations of Ms Newall as to identification of contaminated land within the Ō2NL Project alignment, and the recommended condition to provide for this future process. At this stage the Ō2NL Project includes provision to address potential discharge of hazardous substances and in this respect I consider that it is consistent with the identified objectives and policies.

Water Allocation	
Policy P117: National Policy Statement for Freshwater Management	Objective O43, Objective 44
Policy P118: Water takes at minimum flows and minimum water levels	
Policy P119: Take and use of water as minimum flows and minimum water levels are approached.	
Policy P121: Core allocation for rivers	
Policy P124: Supplementary allocation amounts at flows above the median flow	

Water Allocation	
Policy P125: Reasonable and efficient use Policy P127: Taking water for storage Policy P129: Flow variability Policy P134: Backflow of contaminants Policy K.P1: Minimum flows and minimum water levels in the Kāpiti Coast Whaitua Policy K.P2: Core allocation for rivers and groundwater in the Kāpiti Coast Whaitua	

289. I generally agree with the identification and assessment undertaken by Waka Kotahi. However, I consider Policies P127 and P134, and Kapiti Whaitua Policies K.P1 and K.P2 are also applicable. Mr Thompson notes in his report that information provided as to water takes does not refer to Policy 119, which requires takes to reduce as minimum flow is approached.¹⁸⁰ The step down thresholds in Schedule Q of the PNRP do not list the Waitohu Stream, however, Mr Thompson proposes a step down regime in his report that would meet the Policy direction of P119.¹⁸¹ I note Mr Thompson's view that Waka Kotahi have not addressed flushing flow frequency in the AEE. However, subject to Waka Kotahi confirming that Mr Thompson's understanding of how the supplementary allocation will occur is accurate, Mr Thompson does not consider further analysis by Waka Kotahi, or that any specific conditions are required to ensure compliance with the relevant policy.¹⁸²
290. In relation to efficiency (see Policy P125), Mr Thompson notes the PNRP does not provide any criteria (See Schedule P) as to the type of use proposed. To address this matter Mr Thompson recommends that Waka Kotahi should either:¹⁸³

¹⁸⁰ Policy 119 is mentioned in Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I – Statutory Assessment, Section 67.14, Page 356.

¹⁸¹ Section 87F Report - Michael Thompson – Water Take and Allocation, para 88, 91.

¹⁸² Section 87F Report – Michael Thompson – Water Take and Allocation, para 53.

¹⁸³ Section 87F Report – Michael Thompson – Water Take and Allocation, para 59.

- (a) be more specific about how much water is likely to be acquired from bores, and reduce the volume they are seeking to take from surface water accordingly, or
- (b) reduce the volume of surface water allocation by the same amount acquired once this latter figure has been established.¹⁸⁴

291. The Ō2NL Project includes the taking of water to storage so Policy P127 is relevant. In addition, Policy P134 requiring backflow prevention on water takes is also relevant. In my view, this latter policy should be reflected in the conditions of consent.
292. Finally, I note that Policies K.P1 and K.P2 apply equally to those policies in Chapter 4 in relation to minimum flows, minimum water levels and core allocation. Policy K.P1 states that the minimum flow for the Waitohu Stream is 140 L/s and K.P2 states that the core allocation limit in the Waitohu Stream is 45 L/s.

Summary of objectives and policies analysis under the Regional Plans

293. In general terms I agree, subject to recommendations of the Regional Council's experts, that the Ō2NL Project is consistent with some of the objectives and policies in the One Plan, and the PNRP. The exception are objectives and policies regarding tangata whenua values, hydrology and flooding, and water quality, where, on the information in the application and/or provided through submissions, and pending further information being sought or work underway, the Ō2NL Project either does not meet the objectives and policies or there is insufficient information to reach a conclusion as to whether the provisions are met.
294. I anticipate being able to revisit my opinion once further information and clarification is provided by the technical experts.

District Plans

295. For the purpose of meeting section 104(1)(b)(vi) of the RMA, the Applicant has undertaken an assessment of the Ō2NL Project as to the

¹⁸⁴ Section 87F Report, Michael Thompson – Water Take and Allocation, para 59.

objectives and policies of the relevant District Plans, namely the Horowhenua District Plan (“HDP”), and the Kapiti Coast District Plan (“KCDP”). I agree that the relevant objectives and policies are identified, except where Ms Anderson has identified additional matters. I also agree with the assessment undertaken by Ms Anderson and adopt that as part of my report.

One Plan and PNRP Rules

296. The Applicant has set out a detailed a rule assessment for each of the activities that make up the proposal.¹⁸⁵ In addition, Tables 1 and 2¹⁸⁶ in my report set out in tabular form the consents applied for and the activity status for both regional plans and the NES-F. I concur with the rule assessment undertaken by Waka Kotahi and adopt it for the purposes of this report, with the clarifications set out below.
297. For completeness, in relation to earthworks “cut” to “fill” is covered by Chapter 13 of the One Plan. However, “cut to waste” (discharge to land at the spoil areas) is “cleanfill” and addressed in Chapter 14 of the One Plan. Waka Kotahi is also applying for the discharge of imported material as cleanfill. Therefore, the application includes the discharge of “cut to waste” and “imported material” to land under rule 14-30.
298. For Horizons the most restrictive activity status for the suite of Construction Phase resource consents is non-complying. Similarly, the most restrictive activity status for the consents required for the Operational Phase of the proposal is non-complying. For GWRC the most restrictive activity status for the resource consents for the Construction Phase is discretionary and for the Operational Phase is non-complying.
299. The application states that Waka Kotahi may acquire land where the existing owner holds a water permit for the take and use of groundwater and that this may be transferred to the Applicant.¹⁸⁷ I

¹⁸⁵ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part D – Statutory Context, Section 19, Pages 84 – 101.

¹⁸⁶ At paragraph 25.

¹⁸⁷ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part D – Statutory Context , Section 19.13, Page 102 – 103.

understand that this statement is for information purposes, and there are no related consent applications included in the application.

Overall Activity Status

300. Overall, when bundled, the activities for the Ō2NL Project are to be assessed as a non-complying activity under each Regional Council's plan and the NES-F.

Section 104(1)(C) Other Relevant Matters

301. With regard to other relevant matters, I agree that there are a number of transport related policies at a national and regional level that should be considered. These have been identified in the application,¹⁸⁸ noting the key priority status of the project. In my view it is appropriate to consider these policies in recognising the strategic importance of the Ō2NL Project for land transport across both regions.

Section 104 D Non-complying activity status

302. As identified above, the activity status for the resource consent applications, when bundled, is non-complying.
303. When determining an application for a non-complying activity, under section 104D of the RMA the application must meet one of two tests, known as the gateway tests, before it is assessed under sections 104 and 104B of the RMA. Those tests are:
- (a) the adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii) applies) will be minor; or
 - (b) the application is for an activity that will not be contrary to the objectives and policies of the relevant plan and any proposed plan.

304. The application provides that;

Part G of this report includes an assessment of actual and potential effects on the environment that is supported by a

¹⁸⁸ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I – Statutory Assessment , Section 70.1, Pages 367 – 368.

number of technical assessments and reports included in Volume IV. Those assessments demonstrate that some of the adverse effects of the Project are more than minor. On that basis, the Project does not pass the section 104D(1)(a) effects gateway test.¹⁸⁹

305. I concur with that assessment, noting that, in my view, the adverse effects on the environment that are more than minor relate to:

- (a) Cultural matters;
- (b) Terrestrial ecology concerning the loss of indigenous biodiversity values including those identified under the One Plan and the PNRP;
- (c) Freshwater ecology concerning the loss and modification of stream habitat; and
- (d) Flooding (in the absence of further information).

306. I also consider relevant effects on water quality from sedimentation and resultant effects and the importance of recommended performance standards in managing the risk to water quality, particularly in the sensitive catchments identified in the section 87F Report of Mr Brown.

307. In reaching the above view I have had regard to the mitigation of effects where proposed by Waka Kotahi, but not, as I understand to be appropriate, any positive effects. I concur with Waka Kotahi that the first gateway test, s104D(1)(a) is not met.

308. Turning to section 104D(1)(b), Waka Kotahi concludes that on analysis of regional planning documents and the relevant District Plans the second limb of the gateway test is met, noting that:

The assessment of the proposal against the objectives and policies of the relevant plans set out in Part I of this report finds the proposal to be consistent with the vast majority of the relevant objectives and policies in all of the plans assessed.

¹⁸⁹ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I – Statutory Assessment , Section 73.1, Page 375.

309. Based on my assessment of the regional councils' RPS and regional plans, it is my view, subject to satisfactory resolution of the issues raised with regard to identified outstanding matters, and compliance with the conditions recommended by the regional council experts (particularly in respect of the offsetting limits under the One Plan Policy 13-4 and the PNRP Policy P31, P37 and P110), that the Ō2NL Project is not contrary to some of the objectives and policies of the policy statements and plans.
310. However, on the information available, the Ō2NL Project does not meet some objectives and policies and/or further information is required in order for an assessment to be made. On receipt of further information and/or following discussions, I anticipate to be able to revisit these matters and at that time, I will, as appropriate, update my opinion.

Q. ASSESSMENT AGAINST RMA PROVISIONS

Section 104G - Consideration of activities affecting drinking water supply source water

311. Section 104G states:

When considering an application for a resource consent, the consent authority must have regard to—

- (a) the actual or potential effect of the proposed activity on the source of a drinking water supply that is registered under section 55 of the Water Services Act 2021; and
- (b) any risks that the proposed activity may pose to the source of a drinking water supply that are identified in a source water risk management plan prepared in accordance with the requirements of the Water Services Act 2021.

312. As discussed above, based on the report of Mr Williamson, no drinking water supplies will be affected by the Ō2NL Project.

Section 105

313. Section 105 states:

Where an application is for a discharge permit or coastal permit to do something that would otherwise contravene Section 15 (relating to discharge of contaminants), the consent authority must, in addition to the matters in Section 104(1) have regard to:

- (a) The nature of the discharge and the sensitivity of the receiving environment to adverse effects;
- (b) The Applicant's reasons for making the proposed choice; and
- (c) Any possible alternative methods of discharge, including discharge into any other receiving environment.

314. The nature of the discharge and the sensitivity of the receiving environment to adverse effects are considered by Waka Kotahi in the AEE¹⁹⁰ including discharge of cleanfill, discharge of sediment, and operational stormwater discharges. The sensitivity of the receiving environment is also addressed in the section 87F Reports of Mr Brown, Mr Lambie, Mr Pearce, Mr Farrant and Mr Stacey.
315. Similarly, in relation to section 105(1)(b), Waka Kotahi has set out the reasons for the proposed choice of each discharge type. Reasons include the selection of spoil sites to avoid significant adverse ecological, natural character and cultural effects, use of best practice ESC measures, and treatment devices for operational stormwater having been selected and designed in accordance with the BPO, such that they will achieve a better water quality environment than currently exists.¹⁹¹
316. With regard to section 105(1)(c), the possible alternative methods of discharge were evaluated by Waka Kotahi, who took into account factors such as treatment efficiency, cultural values, access and maintenance and preference for wetlands.

¹⁹⁰ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I – Statutory Assessment, Section 73.6, Pages 377 – 378.

¹⁹¹ Volume IV (Folder 9 of 12), Technical Assessment H – Water Quality.

317. Based on the information provided by Waka Kotahi in the AEE, consideration of the views of submitters and the reviews provided by the section 87F reporting officers, it is my view, subject to the recommended conditions, particularly conditions related to discharges and the receiving environment; that alternative options for the discharges associated with the Project have been adequately considered by Waka Kotahi.
318. Therefore, from a planning perspective, it is my view that the provisions of Section 105 for the Ō2NL Project have been addressed.

Section 107

319. Section 107 of the Act addresses restrictions on the grant of certain discharge permits. This section provides that, except as provided in subsection (2), a consent authority must not grant a discharge permit allowing the discharge of a contaminant or water into water, or onto or into land in circumstances which may result in that contaminant entering water, if, after reasonable mixing, the contaminant discharged is likely to give rise to all or any of the following effects in the receiving waters:
- (a) The production of any conspicuous oil or grease films, scums or foams, or floatable or suspended material;
 - (b) Any conspicuous change in the colour or visual clarity;
 - (c) An emission of objectionable odour;
 - (d) The rendering of freshwater unsuitable for consumption by farm animals; and
 - (e) Any significant adverse effects on aquatic life.
320. Notwithstanding the above, under section 107(2), a discharge permit that allows any of the effects described in section 107(1) may be granted if the decision maker is satisfied that:
- (a) exceptional circumstances justify the granting of the permit; or
 - (b) the discharge is of a temporary nature; or

(c) the discharge is associated with necessary maintenance work – and that it is consistent with the purpose of the RMA to do so.

321. Relying on Mr Brown's section 87F report, it is likely that the discharges resulting from land disturbance operations¹⁹² and operational stormwater discharges¹⁹³ will cause effects as set out in section 107. This is due to the high degree of sensitivity of Ōhau and Waikawa in the Horizons Region and the Waitohu in Greater Wellington, the impact of sedimentation on those values, and the unknown timeframe within which those values will take to recover from sediment deposition. The Project, therefore, needs to meet one of the exceptions in section 107(2).
322. In relation to discharges associated with construction, I generally agree with Waka Kotahi,¹⁹⁴ subject to the recommended conditions in my report, that given the temporary nature of the proposed sediment discharges (5 years), the measures to manage and minimise sediment discharges, and the recommended discharge standards (to ensure the effects are not significant), it is my view that section 107(2) applies in this case. In relation to the efficiency of stormwater treatment devices, I have recommended monitoring and remedial works (if required) conditions to address this issue.
323. Therefore, I consider that these discharges meet the exceptions contained in section 107(2) and from a planning perspective they are not precluded from the grant of consent by section 107(1). I am of the view that the proposed activity is consistent with Section 107 of the Act.

Part 2 Assessment: Sections 5 – 8

324. Section 104 is subject to Part 2. I have provided a summary of my views in relation to Part 2 below, in the event it is required.
325. The purpose of the RMA is to promote the sustainable management of the natural and physical resources. It aims to ensure that communities

¹⁹² Section 87F Report, Logan Brown – Water Quality and Aquatic Ecology, para 42-56.

¹⁹³ Section 87F Report, Logan Brown – Water Quality and Aquatic Ecology, para 109-115.

¹⁹⁴ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I – Statutory Assessment, Section 73.7, Page 379.

manage environmental resources sustainably, while benefiting from the well-being, health and safety they provide. The RMA requires that pursuit of an activity should only occur on the basis that it can achieve section 5 (a), (b) and (c). I consider that the matters of section 5 are supported by the conditions recommended as part of this report.

326. I agree with Waka Kotahi's assessment as to the economic, transport and social benefits of the Ō2NL Project¹⁹⁵ and consider that the proposal as a whole is consistent with the matters contained in section 5. Given the resulting adverse effects relation to cultural effects, the loss of indigenous biodiversity values, and the loss and modification of stream habitat, there is a potential for an impact on soil and water in a manner which may conflict with aspects of Part 2. However, if the recommended conditions are complied with and the offset/compensation package is implemented, then any environmental and cultural impact of the proposed activities could in my view be avoided, remedied or mitigated, and the sustainable management of natural and physical resources promoted in accordance with the purpose of the RMA.

Section 6 – Matters of National Importance

327. I consider that the Ō2NL Project provides for the relevant matters in section 6, and in particular section 6(a), (b), (c), (d), (e), and (h).
328. In particular, I am of the view that the Ō2NL Project has recognised and provided for the natural character of rivers, streams and their margins, although I note the recommendations of the Regional Council experts with regard to the need to ensure landowner approval for natural character mitigation does not impede its implementation. There have also been efforts to enhance public access to parts of margins of rivers and other waterbodies as part of the Ō2NL Project, including through development of the shared path.
329. The relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga has been recognised through the Ō2NL Project, and their input into design and

¹⁹⁵ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Part I – Statutory Assessment, Section 74.1, Pages 379- 380.

implementation of the proposal as Project Partners. Submissions from iwi and hapu on the Ō2NL Project are in support, although a number of issues have been raised with the management of effects through the proposed conditions. This includes a concern that core values of the CEDF have not been reflected in the NoR and resource consent conditions and require further work. I understand this work is being advanced by the Iwi Project Partners and Waka Kotahi.

330. As a consequence, I am of the view that Waka Kotahi has recognised and provided for and matters set out in sections 6(e) of the Act. In addition, the accidental discovery protocol and the monitoring and cultural values framework provided for in conditions (subject to the concerns of Iwi Project Partners with those conditions being resolved) will address any residual effects which may arise as a consequence of the activities.

Section 7 – other matters

331. The Project provides for section 7(a) kaitiakitanga through iwi being a partner to the Ō2NL Project (as I discuss further below under Section 8 matters) and through iwi and hapū having input and advice into the design and implementation of delivery of the Project. The continuing involvement of iwi has been translated into recommended consent conditions. Presently these conditions are limited to the NoR, and in my view, these also need to be linked to the resource consent conditions.
332. The net outcomes of the Ō2NL Project are also consistent with section 7(d) ecosystems and section 7(f) environmental quality because of the avoid, remedy, mitigate approach to adverse effects, the proposed water quality standards, the offset and compensation package (once settled), and the design of the Project and the conditions recommended.
333. Section 7(g) and its emphasis on finite resources has been considered through the provision of fish passage, and through avoiding, remedying and mitigating effects, and implementation of an offsetting/compensation package where residual effects exist.
334. The effects of climate change have been addressed in the bridge and culvert designs, and stormwater control and treatment devices.

335. Therefore, from a planning perspective, it is my view that particular regard has been given to the applicable matters in section 7 of the Act.

Section 8 – Treaty of Waitangi (Te Tiriti o Waitangi)

336. Waka Kotahi has partnered with Muaūpoko Tribal Authority Inc and Lake Horowhenua Trust, Ngā Hapū-o-Ōtaki (Ngā Kapū), Ngā hapū o Kererū (Kōpūtōroa Stream), Ngāti Huia Collective, Ngāti Tukorehe Trust, and Te Kotahitanga o Te Iwi o Ngāti Wehi Wehi through hui and CIAs in the design of the Project. As Iwi Project Partners, I understand that partnership will continue through implementation of the Project.

337. I concur with Waka Kotahi that this partnership-based approach reflects the principles of the Te Tiriti o Waitangi, and is intended to continue, including by realising opportunities for tangata whenua associated with the Ō2NL Project.

338. Based on my analysis of the application, including supporting material, and section 104 and Part 2 of the Act, the Ō2NL Project provides for the relationship of tangata whenua with their ancestral land, water, waahi tapu and taonga. In addition, the ongoing relationship is provided through the proposed conditions (subject to work I understand is underway with regard to further amendments by the Iwi Project Partners and Waka Kotahi), including the Muaūpoko Management Plan, and Ngāti Raukawa ki te Tonga Management Plan and the CEDF.

339. Subject to any views of tangata whenua through this process, it is my view from a planning perspective that the principles of Te Tiriti o Waitangi have been integrated into the Ō2NL Project both in design (including mitigation) and implementation.

R. CONCLUSION

340. This report has analysed the relevant sections 104, 105, 107 of the RMA as required under section 87F. Conditions are recommended pursuant to sections 108 and 108AA below. This analysis includes the individual section 87F expert reports, which have been relied on in preparing my report, and are annexed to this report.

341. Sections of the RMA that have not been referenced (106, 109, 110, 111 and 112) are not considered relevant to this proposal.

S. TERM

342. I have considered the term(s) sought by Waka Kotahi. In recommending term(s), I have given consideration to Chapter 12, Policy 12-5 of the One Plan (which sets a common catchment expiry), Policy 5 of the PNRP and the terms sought by the Applicant.

343. The Ō2NL Project spans four water management sub-zones of the One Plan. The expiry dates are:

(a) Ōhau_1b (Ōhau River and Kuku Stream) - Common Expiry Date 01 July 2012.

(b) West_9a and West_9b (Waikawa Stream and Manakau Stream) - Common Expiry Date 01 July 2014.

(c) Hoki_1a and Hoki_1b (Lake Horowhenua and Hokio Stream catchment) - Common Expiry Date 01 July 2014.

(d) Mana_13e (Koputaroa Stream) – Common expiry date of 01 July 2018.

344. Policy 12-5 provides for a 10 year extension within three years proper to the common catchment expiry date.

345. The common catchment expiry date for the water take at the Waitohu River in the GWRC area is 2034. I agree with Waka Kotahi that with construction estimated to be 4-5 years in duration that the expiry dates of the resource consents across the Ō2NL Project should align.

346. The Applicant has sought a term of 10 years for the consents associated with construction of the Ō2NL Project and 35 years for the consents associated with the ongoing operation of the state highway. In my view, these terms are justified. For the consents associated with construction, and based on an anticipated construction period of 4 to 4 ½ years, a duration of 10 years is considered appropriate. Similarly, for the consents associated with the operational aspects of the Ō2NL Project,

a term of 35 years is also considered appropriate as they will apply for the life of the Ō2NL Project.

347. Should the decisionmaker be of the mind to grant the consent applications, I would recommend the following term(s) for these applications:

Table 1: MWRC Consents Sought

Construction Phase Activity	Consent Type	Duration
<p>A land use consent, a water permit and a discharge permit is sought pursuant to sections 9(2), 14 and 15 of the RMA and Rule 13-2 for large scale earthworks (including the ancillary diversion of water and the discharge of sediment to water) where the earthworks are not:</p> <ul style="list-style-type: none"> - in a rare, at risk or threatened habitat; - within 5m of the bed of a permanently flowing river; - within 5m of the bed of a river that is not permanently flowing and has a width greater than 1m; or - within 10m of a wetland identified in Schedule F. 	Controlled activity	10 years
<p>A land use consent, a water permit and a discharge permit is sought pursuant to sections 9(2), 13, 14 and 15 of the RMA and Rule 13-7 for land disturbance and vegetation clearance (including any ancillary disturbance of the bed of a river division of water and discharge of sediment or slash) that is not in a 'rare', 'at-risk' or 'threatened' habitat and is:</p> <ul style="list-style-type: none"> - within 5m of the bed of a permanently flowing river; - within 5m of the bed of a river that is not permanently flowing and has a width greater than 1m; or - within 10m of a wetland identified in Schedule F but outside of a rare, at risk or threatened habitat. 	Discretionary activity	10 years
<p>A land use consent is sought pursuant to sections 9(2) and 13 of the RMA and Rule 13-8 for large scale earthworks and vegetation clearance within an at-risk habitat.</p>	Discretionary activity	10 years

Construction Phase Activity	Consent Type	Duration
A water permit is sought pursuant to section 14 of the RMA and Rule 13-8 for the diversion of water within an at-risk habitat.	Discretionary activity	10 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule 13-8 for the discharge of water or contaminants to water or land within an at-risk habitat.	Discretionary activity	10 years
A land use consent is sought pursuant to sections 9(2) and 13 of the RMA and Rule 13-9 for large scale earthworks and vegetation clearance within a 'rare' or 'threatened' habitat.	Non-complying activity	10 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule 13-9 for the discharge of water or contaminants to water or land within a 'rare' or 'threatened' habitat.	Non-complying activity	10 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule 14-30 for the discharge or placement of cleanfill.	Discretionary activity	10 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule 15-17 of the One Plan for the discharge of contaminants to air.	Discretionary activity	10 years
A water permit is sought pursuant to section 14 of the RMA and Rule 16-9 for the taking of surface water.	Discretionary activity	10 years
A water permit is sought pursuant to section 14 of the RMA and Rule 16-9 for the taking of water for construction related dewatering outside of an 'at-risk', 'rare' or 'threatened' habitat.	Discretionary activity	10 years
A land use consent, a water permit and a discharge permit is sought pursuant to sections 9(2), 13, 14 and 15 of the RMA and Rule 17-3 of the One Plan as a discretionary activity for the placement of a bridge over the Ōhau River and Waikawa Stream (and associated disturbance, diversion, deposition and discharges).	Discretionary activity	10 years

Construction Phase Activity	Consent Type	Duration
A land use consent, a water permit and a discharge permit is sought pursuant to sections 9(2), 13, 14 and 15 of the RMA and Rule 17-15 of the One Plan for the placement of a bridge over the Waiauti, Manakau and Kuku Streams (and associated disturbance, diversion, deposition and discharges).	Discretionary activity	10 years
A land use consent is sought pursuant to sections 9(1) of the RMA and Regulation 45 of the NES-F for vegetation clearance, earthworks and land disturbance within or near natural wetlands for the purpose of constructing specified infrastructure.	Discretionary activity	10 years

Construction and Operational Phase Activity	Consent Type	Duration
A construction and operational water permit is sought pursuant to section 14 of the RMA and Rule 13-8 as a discretionary activity for the diversion of water within an at-risk habitat	Discretionary activity	35 years
A construction and operational discharge permit is sought pursuant to section 15 of the RMA and Rule 13-8 as a discretionary activity for the discharge of water within an at-risk habitat.	Discretionary activity	35 years
A construction and operational water permit is sought pursuant to section 14 of the RMA and Rule 13-9 as a non-complying activity for the diversion of water within a 'rare' or 'threatened' habitat.	Non-complying activity	35 years
A construction and operational discharge permit is sought pursuant to section 15 of the RMA and Rule 13-9 as a non-complying activity for the discharge of water within a 'rare' or 'threatened' habitat.	Non-complying activity	35 years
An operational discharge permit is sought pursuant to section 15 of the RMA and Rule 14-25 of the One Plan as a discretionary activity for the discharge of treated stormwater to a reach of a surface water body or its bed within a	Discretionary activity	35 years

Construction and Operational Phase Activity	Consent Type	Duration
Schedule B Value of Sites of Significance – Aquatic.		
An operational water permit is sought pursuant to section 14 and Rule 16-9 of the One Plan as a discretionary activity for the taking of water for operational related dewatering outside of an 'at-risk', 'rare' or 'threatened' habitat.	Discretionary activity	35 years
A construction and operational water permit is sought pursuant to section 14 of the RMA and Rule 16-13 of the One Plan as a discretionary activity for the diversion of water outside of an 'at-risk', 'rare' or 'threatened' habitat.	Discretionary activity	35 years
A construction and operational land use consent is sought pursuant to section 13 of the RMA and Rule 17-23 of the One Plan as a discretionary activity for the placement of culverts (and associated disturbance, diversion, deposition and discharges)	Discretionary activity	35 years
A construction and operational water permit and a discharge permit is sought pursuant to sections 14 and 15 of the RMA and Regulation 45 of the NES-F as a discretionary activity the taking, use, damming, diversion, or discharge of water within or near natural wetlands for the purposes of constructing specified infrastructure.	Discretionary activity	35 years
A construction and operational land use consent is sought pursuant to section 13 and Regulation 57 of the NES-F as a discretionary activity for the reclamation of stream beds.	Discretionary activity	Unlimited
A construction and operational land use consent is sought pursuant to section 13 of the RMA and Regulation 71 of the NES-F as a discretionary activity for the placement, use, alteration, extension, or reconstruction of a culvert in, on, over, or under the bed of a river.	Discretionary activity	35 years

Table 2: GWRC Consents Sought

Construction Phase Activity	Consent Type	Duration
A discharge permit is sought pursuant to section 15 and Rule R42 for a discharge to air from the Ō2NL Project works during the construction phase.	Discretionary activity	10 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule R94 for the discharge of cleanfill to land and water.	Discretionary activity	10 years
A water permit is sought pursuant to section 14 and Rule K.R1 for the taking of surface water in the Kāpiti Whaitua.	Restricted discretionary activity	10 years
A land use consent is sought pursuant to sections 9(1) of the RMA and Regulation 45 of the NES-F for vegetation clearance, earthworks and land disturbance within or near natural wetlands for the purpose of constructing specified infrastructure.	Discretionary activity	10 years
A land use consent and a discharge permit is sought pursuant to sections 9(2) and 15 of the RMA and Rule R107 for earthworks and the associated discharge of sediment.	Discretionary activity	10 years
A land use consent and a discharge permit is sought pursuant to sections 13 and 15 of the RMA and Rule R145 of the PNRP as a discretionary activity for the placement of culverts (but not reclamation or diversion of water)	Discretionary activity	10 years

Operational Phase Activity	Consent Type	Duration
A discharge permit is sought pursuant to section 15 of the RMA and Rule R50 of the PNRP as a discretionary activity for the discharge of treated stormwater from the Ō2NL Project.	Restricted Discretionary	35 years

Operational Phase Activity	Consent Type	Duration
A land use consent, a water permit and a discharge consent is sought pursuant to sections 9(2), 14 and 15 of the RMA and Rule R118 of the PNRP as a non-complying activity for the works within, and reclamation of, a wetland.	Non-complying activity	10 years (water permit and discharge permit) Unlimited (land use consent)
A land use consent is sought pursuant to sections 13 of the RMA and Rule R143 of the PNRP the reclamation of streams associated with the piping of the streams.	Non-complying activity	Unlimited
A water permit is sought pursuant to section 14 of the RMA and Rule R147 of the PNRP for diversion of streams.	Discretionary activity	35 years
A water permit is sought pursuant to section 14 of the RMA and Rule R160 of the PNRP for dewatering.	Discretionary activity	35 years
A discharge permit is sought pursuant to section 15 of the RMA and Rule R160 of the PNRP for dewatering.	Discretionary activity	35 years
A water permit and a discharge permit is sought pursuant to sections 14 and 15 of the RMA and Regulation 45 of the NES-F the taking, use, damming, diversion, or discharge of water within or near natural wetlands for the purposes of constructing specified infrastructure.	Discretionary activity	35 years
A land use consent is sought pursuant to section 13 and Regulation 57 of the NES-F of the reclamation of stream beds.	Discretionary activity	Unlimited
A land use consent is sought pursuant to section 13 of the RMA and Regulation 71 of the NES-F for the placement, use, alteration, extension, or reconstruction of a culvert in, on, over, or under the bed of a river.	Discretionary activity	35 years

348. I have also considered the One Plan Policy 12-5(b), the common catchment expiry dates, the balance between environmental protection

and investment, and the provision of s128 reviews. Finally, I note that on-going monitoring and annual reporting as conditions of the consent will be important to identify unanticipated adverse effects and to monitor the implementation of the proposed offset and compensation package.

T. CONDITIONS

349. A suite of conditions relating to all applications were suggested in the application.¹⁹⁶ I have adopted many of these conditions as they relate to the regional council resource consents sought by Waka Kotahi (See Appendix 19).
350. However, I have made additions and changes where I consider it necessary, after taking into account the submissions and expert section 87F reports prepared by the Horizons and GWRC technical advisors, in order to avoid, remedy or mitigate potential adverse effects and offset/compensate residual effects. In some cases, technical experts have also identified issues in section 87F reports which may need to be the subject of a condition following further information and/or discussion.
351. In addition, I understand that the Applicant and Iwi Project Partners are working together on a revised set of conditions. For cultural matters, I consider that the Regional Council consent conditions and the District Council NoR Conditions should be aligned.
352. As there is some outstanding matters where further information by Waka Kotahi on the matters raised in the Regional Councils technical reports, amended or additional conditions may be recommended on behalf of Horizons and GWRC. Further, it is anticipated that some refinement of the wording of the recommended conditions is likely as a result of conferencing of planning and technical experts.

Mark St Clair

28 April 2023

¹⁹⁶ Volume II (Folder 2 of 12) - Assessment of Effects on the Environment, Appendix one.