IN THE ENVIRONMENT COURT OF NEW ZEALAND
WELLINGTON REGISTRY

I MUA I TE KŌTI TAIAO O AOTEAROA
TE WHANGANUI-Ā-TARA ROHE

ENV-2023-WLG-000005

Under the	**RESOURCE MANAGEMENT ACT 1991**
In the matter of	the direct referral of applications for resource consents and notices of requirement under sections 87G and 198E of the Act for the Ōtaki to North of Levin project
By	**NEW ZEALAND TRANSPORT AGENCY-WAKA KOTAHI**
	Applicant

JOINT STATEMENT OF THE WATER ABSTRACTION AND PLANNING EXPERTS

16 August 2023

INTRODUCTION

1. This joint witness statement relates to expert conferencing on the topic of water abstraction, and particularly the content of regional resource consent (water permit) condition RWT1 and the matters agreed in the Joint Statement of Water Abstraction Experts dated 26 July 2023.

2. This joint witness statement relates to the application by the New Zealand Transport Agency-Waka Kotahi (**Waka Kotahi**) for resource consents and notices of requirement under sections 87G and 198E of the Resource Management Act 1991 (**RMA**) for the Ōtaki to North of Levin project (**Project**).

3. The expert conferencing was held on 16 August 2023 via Microsoft Teams.

4. Attendees at the conference were:

   (a) Jack McConchie (Waka Kotahi);

   (b) Ainsley McLeod (Waka Kotahi);

   (c) Grant Eccles (Waka Kotahi);

   (d) Mike Thompson (GWRC);

   (e) Michaela Stout (Horizons); and

   (f) Mark St Clair (Horizons and GWRC).

CODE OF CONDUCT

5. This joint statement is prepared in accordance with section 9.4 of the Environment Court Practice Note 2023.

6. We confirm that we have read the Environment Court Practice Note 2023 and agree to abide by it.

PURPOSE AND SCOPE OF CONFERENCING

7. The purpose of conferencing was to identify, discuss, and highlight points of agreement and disagreement on the content of Condition RWT1 with reference to the agreement of experts recorded in the Joint Statement of Water Abstraction Experts dated 26 July 2023.

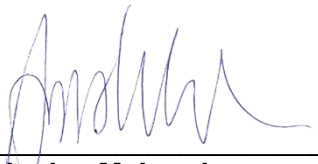
8. Except as set out in **Annexure A**, the amendments to Condition RWT1 included in red underlined and ~~red strikethrough~~ in **Annexure B** address all

recommended changes to conditions agreed in the Joint Statement of Water Abstraction Experts dated 26 July 2023.

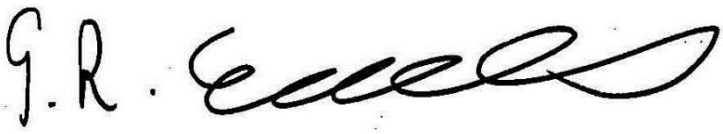
9. The attendees agree that the primary data, methodologies and standards, and key facts and assumptions are as set out in the Assessment of Environmental Effects for the Project and the associated Appendices and Technical Assessments.

Date: 16 August 2023

Jack McConchie



Ainsley McLeod



Grant Eccles

Mike Thompson

Michaela Stout

Mark St Clair

ANNEXURE A – EXPERT CONFERENCING ON WATER ABSTRACTION CONDITION RWT1

Participants: Jack McConchie (JM), Ainsley McLeod (AM), Grant Eccles (GE), Mike Thompson (MT), Michaela Stout (MS) and Mark St Clair (MSC).

No.	Issue	General discussion	Agreed Position	Disagreements or reservations, with reasons
1	Including methodology in Table RWT-1.2 (Koputaroa)		The water abstraction JWS seeks the inclusion of "using a methodology agreed with the consenting authorities" in Table RWT-1.2. All agree that a condition should not allow for a subsequent agreement between the parties.	AM and GE consider that the requirement to comply with the Standards in Table RWT-1.1 and RWT-1.2 establish the parameters within which the water abstraction may be undertaken. MSC considers that the methodology should be specified in the condition. JM considers that given the scale of effects and uncertainty of flow measurements, a simple area-based approach is appropriate for Koputaroa Stream. MS (for the Koputaroa) given the uncertainty about the flow yield and anecdotal information in Mr Brown's evidence, some empirical data should be collected to verify the catchment yield approach proposed by Waka Kotahi.

No.	Issue	General discussion	Agreed Position	Disagreements or reservations, with reasons
2	Including methodology in Table RWT-1.2 (Waikawa)		MT, JM and MS agree that amending the rate of abstraction to 9% appropriately recognises losses. GE, AM and MSC agree that the amendment to Table RTW-1.2 (Waikawa Stream) meets the requirements of a condition without reserving discretion.	
3	Including methodology in Table RWT-1.2 (Manakau and Waiauti)		MT, JM and MS agree that including individual and combined requirements to account for the two takes addressed in this row of Table RWT-1.2. GE, AM and MSC agree that the amendment to Table RTW-1.2 (Manakau and Waiauti Stream) meets the requirements of a condition without reserving discretion.	
4	Table RWT-1.2 (Waitohu) [note: this matter is not addressed in the JWS of Water Abstraction Experts, but is raised in the	Whether the "*The rate of abstraction cannot exceed 37.5L/s*" results in taking all allocation based in the instantaneous rate of take.	MT, JM and MS agree that reducing the rate of take in Table RWT-1.2 to a maximum of 26L/s will ensure that the stream is not at full allocation. AM, GE and MSC agree that this amendment means that the proposed	

No.	Issue	General discussion	Agreed Position	Disagreements or reservations, with reasons
	JWS of Planning Experts]		water take is consistent with the relevant provisions of the NRP.	
5	Table RWT-1.4		The water abstraction JWS seeks the inclusion of "using a methodology agreed with the consenting authorities" or "determined by the consenting authorities" in Table RWT-1.4. All agree that a condition should not allow for a subsequent agreement between parties. To address this, MS, MT and JM agree that Table RWT-1.5 be amended to include reference to the median values along with an additional clause to maintain residual flows above the median flow. GE, AM and MSC agree that the amendment to Table RTW-1.4 meets the requirements of a condition without reserving discretion.	
6	Maintenance of the Project hydrometric site	Is there a need for a condition requiring maintenance of the		AM and GE are not persuaded that the condition is necessary, including because the site is existing and it is not

No.	Issue	General discussion	Agreed Position	Disagreements or reservations, with reasons
		site to the standard in the National Environmental Monitoring Standard 'Open Channel Flow Measurement'.		clear whether the maintenance of the site is otherwise addressed or managed. JM, MS and MT agree that the following is included: "*The Project hydrometric site Koputaroa at Tavistock Road must be maintained in general accordance with the 'National Environmental Monitoring Standard 'Open Channel Flow Measurement version 1.1' dated June 2013*." MSC understands that the maintenance of the Koputaroa site is for the purpose of being able to exercise the consent in terms of the water take and as such a condition as to maintenance is required.
7	Notes and standard conditions (clause (f))	The inclusion of notes, advice notes and standard conditions.		No agreement was reached in respect of the inclusion of standard conditions for water measuring devices/systems. It is agreed that these require further discussion between witnesses and parties.

No.	Issue	General discussion	Agreed Position	Disagreements or reservations, with reasons
8	Additional matter (not addressed in the Water Abstraction JWS) – surrender of consents		All agreed with the statement in the evidence of JM at paragraphs 273(i), 274(i), 275(i), 276(f), 277(i) that states "*consent should be surrendered following completion of construction, or after 10 years, whichever comes first*".	Due to time constraints, the planners have not agreed a condition drafting response.

ANNEXURE B – AGREED AMENDMENTS TO CONDITION RWT1

Surface Water

RWT1

Surface water abstraction

a) The total daily abstraction of surface water from the 'core allocation' must not exceed:

i. an annual average of 2,350m³; and

ii. a maximum of 3,900m³.

b) The abstraction of surface water to support construction activities must not exceed the maximum volumes ~~or~~ in Table RWT-1.1, and ~~subject to~~ the maximum abstraction rates in Table RWT-1.2:

Table RWT-1.1 Maximum Daily Abstraction Volume from the 'Core Allocation'

Water body	Maximum abstraction volume
	m³/day
Koputaroa Stream	231
Waikawa Stream	~~3,100~~2,998
Manakau and Waiauti Stream	102
Waitohu	2,160

Table RWT-1.2 Maximum Daily Abstraction Rate from the 'Core Allocation'

Water body	Maximum abstraction rate
Koputaroa Stream	Between the minimum and median flows, the rate of abstraction should not exceed 10% of the one (1) hour average ~~mean daily~~ flow measured at 6am adjusted for losses or gains between the ~~Project's~~ hydrometric site ~~at Tavistock Road over the preceding day, adjusted for losses or gains between the hydrometric site~~ and the point of abstraction.
Waikawa Stream	Between the minimum and median flows, the rate of abstraction should not exceed ~~9~~10% of the one (1) hour average ~~mean daily~~ flow measured at 6am to allow for losses between Horizon's hydrometric site at North Manakau Road ~~over the preceding day, adjusted for losses or gains between the hydrometric site~~ and the point of abstraction.
Manakau and Waiauti Stream	Between the minimum and median flows: a) the combined maximum rate of abstraction from the Manakau and Waiauti Streams must~~, the rate of abstraction from either site should~~ not exceed 10% of the one (1) hour average flow measured at 6am ~~of the mean daily flow measured~~ at Horizon's hydrometric site Manakau at State Highway 1 bridge; and b) the maximum rate of take from either the Manakau or Waiauti Stream must not exceed 5% of the one (1) hour average flow measured at 6am at the Horizon's hydrometric site Manakau at State Highway 1 bridge ~~over the preceding day, once adjusted for the effect of catchment area~~;
Waitohu	Between the minimum and median flows, the rate of abstraction should not exceed 10% of the one (1) hour average ~~mean daily~~ flow measured at 6am at the Waitohu Stream WSI flow recorder less 30L/s ~~Greater Wellington Regional Council's hydrometric site over the preceding day, adjusted for losses or gains between the hydrometric site and the point of abstraction~~. The rate of abstraction cannot exceed 26~~37.5~~L/s.

c) When flow in the following water body/ies is above the median flows, the rates and volumes set out in clause (bc) can be exceeded subject to the maximum abstraction rates specified in Table RWT-1.3, and the parameters set out in Table RWT-1.4.

Table RWT-1.3 Maximum Abstraction Rate when flow is above median ('Supplementary Allocation')

Water body	Maximum abstraction rate (L/s)
Koputaroa Stream	30
Ohau River	100
Waikawa Stream	100
Manakau and Waiauti Stream	50
Waitohu Stream	100

Table RWT-1.4 Parameters for Abstraction when flow is above median ('Supplementary Allocation')

Water body	Abstraction parameters
Koputaroa Stream	When flow measured at the Project's hydrometric site at Tavistock Road exceeds the median (0.15m^3/s), up to 410% of the preceding 3-hourly average flow can be abstracted for the next 3-hours~~, once adjusted for time between the flow recorder and the point of abstraction~~.
Ohau River	When flow measured at Horizons' hydrometric site Ohau at Rongomatane exceeds the median (4.207m^3/s), up to 10% of the preceding 3-hourly average flow can be abstracted for the next 3-hours~~, once adjusted for travel time between the flow recorder and the point of abstraction~~.
Waikawa Stream	When flow measured at Horizons' hydrometric site Waikawa at North Manakau Road exceeds the median (0.874m^3/s), up to 10% of the preceding 3-hourly average flow can be abstracted as a supplementary allocation for the next 3-hours~~, once adjusted for travel time between the flow recorder and the point of abstraction~~.
Manakau and Waiauti Stream	When flow measured at Horizons' hydrometric site Manakau at State Highway 1 bridge exceeds the median (0.180m^3/s): ~~, up to 10% of the preceding 3-hourly average flow can be abstracted as a supplementary allocation for the next 3-hours, once adjusted for travel time between the flow recorder and the point of abstraction~~: a) the combined maximum rate of abstraction from the Manakau and Waiauti Streams must not exceed 10% of the preceding three (3) hourly average flow measured at Horizon's hydrometric site Manakau at State Highway 1 bridge for the following three (3) hours; and b) the maximum rate of take from either the Manakau or Waiauti Streams must not exceed 5% of the preceding three (3) hourly average flow measured at Horizon's hydrometric site Manakau at State Highway 1 bridge for the following three (3) hours.
Waitohu	When flow measured at GWRC's hydrometric site Waitohu Stream WSI exceeds the supplementary allocation trigger value (0.510m^3/s) ~~median~~, up to 10% of the 3-hourly average flow can be abstracted as a supplementary allocation for the next 3-hours~~, once adjusted for travel time between the flow recorder and the point of abstraction~~.

d) The abstraction of surface water under the supplementary allocation in Table RWT-1.4 must not reduce the residual flow below the median.

e~~d~~) The abstraction of surface water set out in clauses (b~~a~~) and (c) must occur at the locations shown on the Accommodation Works Plans included in the Application.

fe) The abstraction of surface water must cease in the circumstances in Table RWT-1.5.

Table RWT-1.5 Circumstances when Abstraction of Surface Water Must Cease

Water body	Circumstances
Koputaroa Stream	The flow measured at Horizon's' hydrometric site on the Manawatū River at Teachers' College reaches the One Plan minimum flow; or the flow measured at the Project's hydrometric site on Koputaroa Stream at Tavistock Road reaches the minimum flow defined as 95% of the 1-day MALF, calculated in manner consistent with that adopted in the One Plan.
Waikawa Stream	The flow measured at Horizon's' hydrometric site Waikawa at North Manakau Road reaches the One Plan minimum flow.
Manakau and Waiauti Stream	The flow measured at Horizon's' hydrometric site at Manakau at State Highway 1 bridge Gleeson's Road reaches the One Plan minimum flow.
Waitohu	The flow measured at Greater Wellington Regional Council's hydrometric site Waitohu Stream at WSI reaches the Natural Resources Plan minimum flow.

gf) For each water take, a flow meter must be installed and maintained, and the provision for the transfer of data being by telemetry in real time.

must:

i. be located on the abstraction line;

ii. have a pulse counter output traceably calibrated to plus or minus (+/) five (5) percent or better; and

iii. be capable of providing daily water use as well as pulse counter data.

h) A record of the daily water volumes abstracted and rates of water abstracted must be maintained and provided to the Regional Council and Project Iwi Partners on request.

i) Flow data from the Project hydrometric site Koputaroa at Tavistock must be telemetered to the Regional Council in real time.