# Before an Independent Hearing Commissioner At Lower Hutt

Under	the Resource Management Act 1991 (' <b>the Act'</b> )
In the matter of	A notice of requirement for a designation by Wellington Water Limited (' <b>WWL</b> '), on behalf of Hutt City Council (' <b>HCC</b> '), in accordance with section 168A of the Act, for the construction, operation and maintenance of a water supply reservoir at Summit Road, Fairfield, Lower Hutt.

# Legal submissions in reply for Wellington Water Limited

Dated 17 December 2024

#### May it please the Commissioner:

#### 1 Introduction

- 1.1 Following the hearing on 28 November 2024, the purpose of these submissions in reply for Wellington Water Limited ('WWL') is to address discrete matters discussed with the Commissioner at the conclusion of the hearing.
- 1.2 These submissions do not repeat or replace the opening submissions dated 26 November 2024, and are not intended to respond in detail to the presentations made by submitters at the hearing. In that regard, WWL relies on the submissions presented by counsel and matters addressed orally by WWL's witnesses.
- 1.3 These submissions comment on:
  - a Planning conferencing following the hearing;
  - b The implications or relevance of amendments to the National Policy Statement for Indigenous Biodiversity ('NPS-IB') through the Resource Management (Freshwater and Other Matters) Amendment Act 2024 ('Amendment Act');
  - c Whether the reservoir is classified as a 'dam' (for the purposes of the Building Act 2004 and an associated regulation);
  - d Further information and assessments provided by WWL's witnesses
    (attached to these submissions), and the Joint Witness Statement dated 17
    December 2024 ('JWS');
  - e Guidance from case law on the requirements for, and appropriate use of, management plans in RMA conditions; and
  - f WWL's position on key issues in relation to the proposed conditions, including further changes proposed by HCC (Regulatory).

#### 2 Conferencing on planning matters

2.1 Following the in-person hearing on 28 November 2024, Ms Cathy Crooks for WWL has met with Mr Dan Kellow for HCC (Regulatory) to discuss the proposed conditions and related planning matters (i.e. Policy 51 to the Regional Policy Statement).

- 2.2 Ms Crooks provided an updated set of conditions (showing additional changes proposed by WWL, marked up against the version circulated prior to the hearing) to Mr Kellow on 5 December 2024.
- 2.3 Mr Kellow in turn provided a condition set with further changes proposed by HCC (Regulatory) and a covering explanation for those changes, on 13 December 2024. That document is attached as Appendix C to the JWS, and relied upon by Mr Kellow in the JWS in relation to the conditions on which he and Ms Crooks do not agree.
- 2.4 Substantive issues in relation to the proposed conditions are addressed further below.

#### 3 Amendments to the NPS-IB through the Amendment Act

- 3.1 WWL's opening submissions noted that changes to the RMA introduced by the Amendment Act do not have any implications for the application of the National Policy Statement for Freshwater Management ('NPS-FM') to this Project.<sup>1</sup>
- 3.2 As discussed at the hearing, the Amendment Act also has no implications for the Commissioner's consideration of the NPS-IB (which in other respects is more relevant to the notice of requirement ('**NOR**') than the NPS-FM). That is because:
  - a The changes relate to local authority obligations under the NPS-IB to identify and include in district plans *new* significant natural areas ('SNAs') for 3 years.<sup>2</sup>
  - b In this case, it is undisputed that the Significant Natural Resource ('SNR-12') in the District Plan has the status of an significant natural area ('SNA') under the NPS-IB (and that status is unchanged by the Amendment Act).<sup>3</sup>

#### 4 Classification of the reservoir

4.1 Whether the reservoir is classified as a dam is relevant for the purposes of obtaining Building Act 2004 approvals, and to ensure compliance with the Building (Dam Safety) Regulations 2022 (the '**Regulations**'). For completeness, the reservoir does not fall within the definition of a dam for these purposes,<sup>4</sup> as a structure must be an 'artificial barrier' before it can be classified as a dam. The

<sup>&</sup>lt;sup>1</sup> Opening legal submissions dated 26 November 2024, at 9.8-9.9 (noting that the NPS-FM is likely of limited relevance or importance for the consideration of the NOR in any event).

<sup>&</sup>lt;sup>2</sup> And even less relevantly, alter the consideration of coal mining activities under the NPS-IB.

<sup>&</sup>lt;sup>3</sup> See new section 78(6)(a) RMA, as modified by section 21AA of the Amendment Act.

<sup>&</sup>lt;sup>4</sup> See section 7, Building Act 2004.

proposed reservoir should not be confused with a body of water that is impounded by a dam.

4.2 While the Ministry of Business Innovation and Employment's Guide to complying with the Regulations has recently been updated, effective 26 November 2024, that has no bearing on whether the reservoir ought to be classified as a dam in the first place.<sup>5</sup>

#### 5 Further material provided

- 5.1 Attached to these submissions is additional material following the hearing on 28 November 2024, as discussed:
  - a A memorandum prepared by **Mmes Crooks** and **Burns<sup>6</sup>** regarding the calculation of stormwater discharges (**Appendix A**);
  - A memorandum from Ms Fowler regarding Daysh Street crash data (Appendix B); and
  - A memorandum prepared by Mr Hansen addressing ecological matters arising from comments at the hearing and proposed changes to the conditions (Appendix C).
- 5.2 The key points from this additional material are outlined below.

#### Stormwater calculations

5.3 The calculation of stormwater discharges did not (and did not need to) include impervious surface associated with the existing Naenae Reservoir, because the stormwater from the existing reservoir will continue to be discharged to a different part of the stormwater network (via Summit Road).

#### **Crash history**

5.4 The crash history on Daysh Street is not of particular concern compared to the rest of the road network, and does not change Ms Fowler's assessment that additional heavy vehicles associated with reservoir construction pose a negligible additional safety risk.

<sup>&</sup>lt;sup>5</sup> See Ministry of Business, Innovation & Employment "Guide to complying with the Damn Safety Regulations" (26 November 2024) <<u>https://www.building.govt.nz/assets/Uploads/managing-buildings/building-safety/guide-to-complying-with-the-dam-safety-regulations.pdf</u>>. Note the reservoir also does not fall within any of the illustrative examples of dams set out in this guidance (see section 7.1 'types of dams').

<sup>&</sup>lt;sup>6</sup> For completeness, Petra Burns is a Project Director at WSP, who is working on this Project.

#### **Ecological effects**

- 5.5 The supplementary memorandum provided by **Mr Hansen** sets out a number of matters arising from the further work on proposed conditions following the hearing, and the feedback or comments received from HCC.
- 5.6 In summary, it addresses:
  - a The hierarchy of management plans (as contained in the updated conditions), whereby the Lizard Management Plan (prepared under the Wildlife Act process) is effectively the 'lead' management plan that other ecological management plans take their lead from and must be consistent with
  - b Clarity on remediation planting ratios: Mr Hansen's view is that the concept of a planting 'ratio' is not applicable here (as it is more relevant to offsetting), instead the intention (now more clearly stated in conditions) is simply that 100% of the affected area that is able to be remediated, will be remediated
  - Why mānuka seed collection on-site is not required as a consent condition (as proposed by **Ms Kerkmeester**); and
  - d Why biodiversity offsetting (compensation, off-site enhancement planting, weeding or restoration work) proposed by **Ms Roberts** does not need to be included in the conditions; and
  - e Other proposed changes to the ecology and vegetation conditions proposed by HCC (Regulatory), discussed below.

#### 6 Policy 51 of the RPS

6.1 As recorded in the JWS, Ms Crooks and Mr Kellow have concluded that the Project is consistent with Policy 51 of the Regional Policy Statement for the Wellington Region. While the review table focusses on the Proposed RPS Change 1, they note that the same considerations would be broadly relevant under the operative version.

- 6.2 During the hearing, the Commissioner asked about the status of the decisions version of this policy, whether it had been the subject of appeal, and accordingly how much 'weight'<sup>7</sup> could be given to it.
- 6.3 That question may be less important now, given the agreed position of the expert planning witnesses (i.e. that the Project is consistent with the decisions version of the Policy in any event), however for completeness:
  - a The decisions on the RPS were notified on 4 October 2024;
  - b The decision altered Policy 51 from the operative version, and largely provided for more stringent requirements to be considered in relation to the risks and consequences of natural hazards;
  - c The decisions version of Policy 51 has now been appealed by a number of parties. Notably, among them is HCC, which has sought that Policy 51 be amended so as to be less onerous (including by changing the focus of the policy from 'avoiding' to 'minimising' hazards, and by having the policy only apply at the plan-making stage rather than to individual resource consent and notice of requirement decisions); and
  - d As such, it is submitted that less weight should be given to Policy 51 (and the specifics of its wording) than would normally be the case. Mr Kellow also agrees with that position, as stated paragraph 2.4 of the JWS (and paragraph (1) of the HCC comments document attached to the JWS).

#### 7 Use of management plans, and revised conditions

- 7.1 At the commencement of the hearing, the Commissioner asked about the case law relating to management plans, and the extent to which they need to contain clear requirements.
- 7.2 Since then, the proposed conditions have been further revised (with input from the relevant expert witnesses) to provide greater clarity in a number of respects, including to 'sharpen' the purposes of the various management plans where this was a live issue during the hearing as well as being the subject of expert conferencing.

<sup>&</sup>lt;sup>7</sup> See, for example, Keystone Ridge Ltd v Auckland City Council HC Auckland AP24/01, 3 April 2001 for the case law principle that a planning document should generally be given more weight in the substantive determination of a resource consent or NOR the further it moves through the planning process (from proposed to operative)

#### Case law guidance

- 7.3 For completeness, the relevant case law indicates (in summary) that management plans are an appropriate tool in RMA conditions, but are not a substitute for conditions setting requirements which must be met. Instead, the purpose of management plans is to ensure there is compliance with the standards in conditions.<sup>8</sup>
- 7.4 The courts have also been critical of open-ended management plan conditions that simply direct the management plan to 'manage' or 'minimise' adverse effects, without any reference to an objective standard.<sup>9</sup>
- 7.5 This is consistent with the guidance in the Environment Court Practice Note<sup>10</sup> which states that 'there should be clarity, certainty and enforceability of all the conditions' and 'conditions which require expert certification or oversight of an activity must include clear parameters and specified standards'.
- 7.6 Since the hearing, the proposed conditions have been carefully reviewed with these principles in mind. It is submitted that the version of the conditions proposed by WWL and included with the JWS comply with these requirements.

#### Key changes to conditions

- 7.7 Notable changes to the conditions<sup>11</sup>, including changes to better align with the principles above, include the following:
  - A general requirement for management plans to be prepared with reference to applicable industry standards and guidance (as well as being prepared by a 'suitably qualified person');<sup>12</sup>
  - b New clauses (g) and (h) to condition 8, confirming the need for all management plans to be consistent with the Lizard Management Plan ('LMP') (which will be separately approved under the Wildlife Act 1953), and to be consistent with one another (with the intention that each plan would take its lead from the previous one, in the following sequence: LMP, Bird Management Plan ('BMP'), Vegetation Management Plan ('VMP') and

<sup>&</sup>lt;sup>8</sup> See, for example, Summerset Villages (Lower Hutt) Ltd v Hutt City Council [2020] NZEnvC 114 at [156].

<sup>&</sup>lt;sup>9</sup> See, for example Panuku Development Auckland Ltd v Auckland Council [2020] NZEnvC 186 at [106].

<sup>&</sup>lt;sup>10</sup> Environment Court Practice Note (2023), clause 10.4(e), subclauses v. and x.

<sup>&</sup>lt;sup>11</sup> Note that changes to the conditions identified in this document are shown as against the 'clean' version of conditions (which included responses to the Section 42A Report and Minute 2) tabled on 26 November 2024.

<sup>&</sup>lt;sup>12</sup> Condition 8.

Landscape Concept Plan ('**LCP**'), and Construction Environment Management Plan ('**CEMP**');

- c Changes to the conditions setting out the purpose and content of the Construction Noise and Vibration Management Plan ('CVNMP') (conditions 18-20) to make it clear that the purpose of this plan is develop and implement the best practicable option to manage construction noise effects and comply with the (objective and clearly stated) noise limits in conditions 25 and 26 as far as practicable. Condition 20 has been amended to clarify notification of construction activities must occur in advance of works taking place;
- d Amendments to condition 21 to clarify the requirement for noise fences;
- e Inclusion of a reference to temporary relocation in relation to night works in condition 22,<sup>13</sup> as part of the CNVMP (consistent with **Mr Terry's** evidence and as discussed at the hearing);
- f A reference to the relevant guidance material has been added to the Construction Traffic Management Plan (**'CTMP**') conditions;<sup>14</sup>
- g The management plan conditions for the BMP and VMP have been substantially refined and re-ordered, in order to clarify the requirements. In particular, new conditions 38(d) and (f) confirms that all areas where vegetation is lost that are able to be remediated must in fact be replanted;<sup>15</sup>
- h With regard to seismic resilience, a change to condition 42 confirms that the engineered solution must be in accordance with the relevant standards; and
- i A new requirement to replace any planted vegetation that might be lost in the future due to maintenance activities.
- 7.8 In large part (and except as otherwise indicated) these changes have been agreed or accepted by Mr Kellow for HCC.<sup>16</sup>
- 7.9 The further changes to conditions suggested by HCC largely relate to the requirements for BMP (condition 36) and the VMP (condition 38). Mr Kellow

<sup>&</sup>lt;sup>13</sup> Confined to Summit Road and Tilbury Street residents on the first evening of a concrete pour, on the basis that this was the location and time where such an option might be justified.

<sup>&</sup>lt;sup>14</sup> See condition 27.

<sup>&</sup>lt;sup>15</sup> While this was always the intention, it was not previously clear from the conditions on their face.

<sup>&</sup>lt;sup>16</sup> As recorded in the HCC comments document at (2).

indicates<sup>17</sup> that these changes have been informed by feedback from Ms Roberts (ecology) and Ms Kerkmeester (landscape and visual).

7.10 WWL has carefully worked through these changes with input from Mr Hansen, and where possible, the suggested changes have been accommodated.

#### Matters not agreed between WWL and HCC

- 7.11 As recorded in the JWS at paragraph 2.2, there are a relatively small number of conditions or clauses of conditions on which **Mr Kellow** and **Ms Crooks** did not agree (and in those respects WWL's position differs from HCC's accordingly).
- 7.12 For clarity, the conditions at Appendix C to the JWS include the full set of changes (either deletions or additions) suggested by HCC. Appendix A to the JWS shows agreed deletions or additions in black, further consequential changes proposed by Ms Cooks (and supported by WWL) in green, and changes suggested by Mr Kellow but *not* adopted by Ms Crooks (or WWL) as blue deletions.
- 7.13 In summary, the matters not agreed are:
  - a A requirement for the Bird Management Plan to define vegetation types that provide nesting habitats (condition 36.c));
  - b The type of methods that may be used to demarcate active nests and buffer zones for protected birds (condition 36.g));
  - c Minimum buffer zones for protected birds (condition 36.h));
  - d Whether to specify only one species of nesting bird for pre-work checks (condition 36.j));
  - e Whether to refer to the 'active nest season or 'breeding season' in relation to pre-works checks for kārearea (condition 36.k)); and
  - f Whether the 'enhancement' of the surrounding environment is required (condition 36.c)).
- 7.14 The rationale for WWL's position is set out in the JWS at paragraph 2.3.a and inMr Hansen's memorandum attached as Appendix C to these submissions.

<sup>&</sup>lt;sup>17</sup> JWS at 2.3.b and Appendix C paragraph (2).

- 7.15 To a large extent the remaining differences boil down to competing views of the two ecology witnesses. With respect, WWL submits that the views and assessment of **Mr Hansen** should be preferred, on the basis that:
  - He is the more experienced witness, with particular expertise in matters of terrestrial ecology (having developed and implemented numerous bat, bird, lizard and vegetation management plans), while Ms Roberts' expertise (as noted in her online profile<sup>18</sup>) is in freshwater ecology; and
  - b Specifically in relation to the suggested enhancement or offsetting, as noted in the opening submissions for WWL<sup>19</sup> the relatively undisputed finding is that the effects of the Project on SNR12 will not be 'more than minor'. As such there is no basis in the NPS-IB for offsetting being required through condition (and **Mr Kellow** has not provided any explanation from a planning perspective as to why the conditions suggested by HCC are consistent with the NPS-IB requirements).

#### 8 Conclusion

8.1 WWL asks the Commissioner to confirm the NOR, with the designation conditions as proposed by Ms Crooks in Appendix A to the JWS.

Hudged

Ezekiel Hudspith / Ben Attwood Counsel for Wellington Water Limited

<sup>18</sup> https://www.wildlands.co.nz/people/tessa-roberts/

<sup>&</sup>lt;sup>19</sup> WWL opening legal submissions, at 9.3-9.7.

# Appendix A Stormwater discharges from existing Naenae Reservoir memorandum



# Memorandum

То	Ezekiel Hudspith, Dentons Kensington Swan
Сору	
From	Cathy Crooks & Petra Burns
Office	Wellington
Date	2 December 2024
File/Ref	3-WW021.02/00420
Subject	Stormwater discharges from existing Naenae Reservoir

During the hearing on Thursday 28 November, Commissioner Jones queried whether the Flooding Memo dated 5 November 2024 attached to the evidence of Catherine included the impervious area of the existing Naenae Reservoir in the stormwater calculations.

We can confirm that it **does not.** This is because the stormwater from the existing reservoir discharges to a different catchment down Summit Road as shown in Figure 1 and Figure 2. It will therefore not impact on stormwater discharges into Waiwhetū Stream at the overflow discharge point subject to the Notice of Requirement.



Figure 1: Existing overland flow paths (blue lines) with new reservoir position overlain.

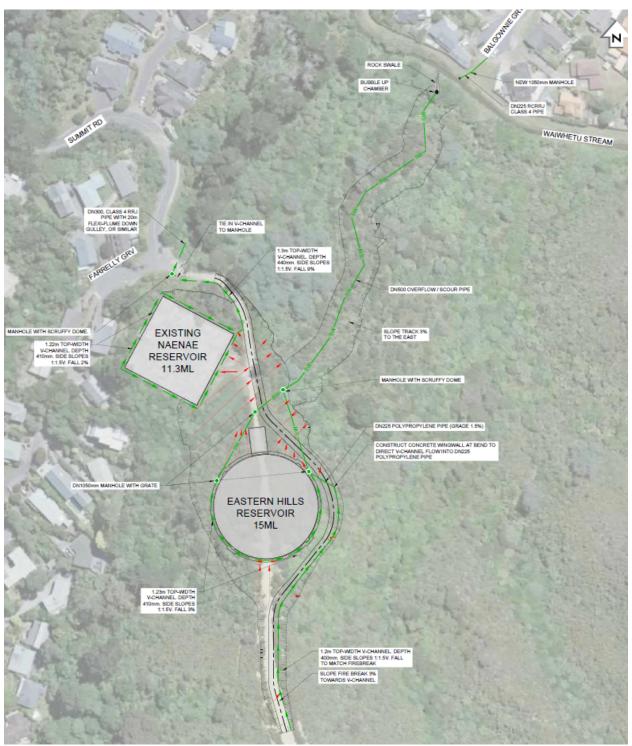


Figure 2: Proposed stormwater system design showing stormwater flow (green arrows)

# Appendix B Daysh Street crash history memorandum



# Memorandum

То	Ezekiel Hudspith
Сору	
From	Hilary Fowler
Office	Wellington
Date	2 December 2024
File/Ref	3-WW021.02
Subject	Daysh Street crash history

Following the Eastern Hills Reservoir hearing on 28 November, 2024, I have reviewed the crash history of Daysh Street, as per Commissioner Jones' request. I have obtained crash data from the NZ Transport Agency's Crash Analysis System (CAS) for the 10-year period from 2014-2023 (2024 is unavailable).

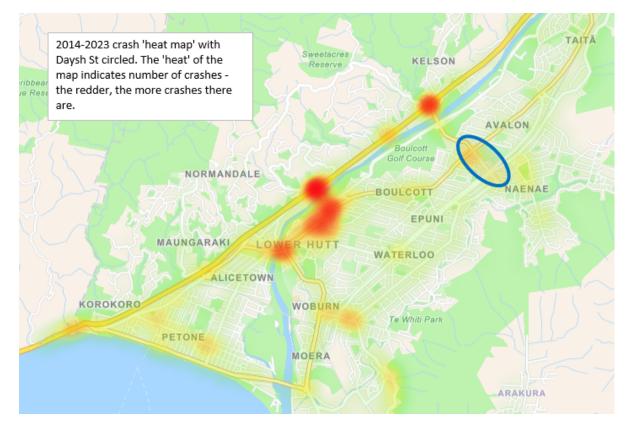
Attached is an automatically-generated report of crash statistics for Daysh Street between High Street and Oxford Terrace. I have highlighted statistics that may be of particular interest.

There have been 26 crashes in total, seven of which resulted in injury (one serious). Trucks were not involved in any of the recorded crashes. Two crashes involved a pedestrian or cyclist.

- One crash involved a cyclist
  - o minor injury
  - o not school related (during summer holidays)
  - o victim was aged 10-14
- One involved a pedestrian
  - o non-injury
  - probably school-related, as the crash took place at school drop-off time and the victim was aged 10-14
  - involved a teenager being struck by a light vehicle running a red light at the start of the school day

Three of the total number of crashes took place at school pick-up and drop-off times (assumed to be 8:30-9am and 3-3:30pm). All were non-injury crashes.

The following image is a 'heat-map' which shows crash incidences relative to the rest of Lower Hutt. This indicates that Daysh Street does not have a crash history of particular concern compared to the rest of the road network. The crash statistics do not change my assessment that heavy vehicles associated with reservoir construction travelling along Daysh Street pose negligible additional risk.



Please also note that by 1 July 2026, the 2024 Setting of Speed Limits Rule states that Road Controlling Authorities must implement a 30 km/h variable speed limit operating outside school gates during school travel periods.<sup>1</sup> This will affect Daysh Street between High Street and Oxford Terrace (because there is small gate from the schools onto Daysh Street, which is not the main gate). The variable speed limit applies for a 300m length total. This does not mean 150m either side of the school gate; in the case it will probably mean from the High Street intersection for 300m but this will be up to Hutt City Council when they implement the variable speed limit. The introduction of a variable speed limit will improve safety during pick-up and drop-off times.

Regards,

Hilary Fowler Senior Transport Planner, WSP

<sup>&</sup>lt;sup>1</sup>Section 5 of <u>https://nzta.govt.nz/assets/resources/rules/docs/land-transport-rule-setting-of-speed-limits-2024-signed.pdf</u>

### **Overall crash statistics**

### Crash severity

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	CRASH SEVERITY	NUMBER	%	SOCIAL COST \$(M)	
	FATAL	0	0.00	0.00	
	SERIOUS	1	3.85	1.00	
	MINOR-INJURY	6	23.08	1.86	
	NON-INJURY	19	73.08	0.74	
	TOTAL	<mark>26</mark>	100.00	3.62	

### Crash numbers

YEAR	FATAL	SERIOUS	MINOR	NON-INJURY
2014	0	0	0	2
2015	0	0	0	1
2016	0	0	1	1
2017	0	1	2	4
2018	0	0	1	1
2019	0	0	0	3
2020	0	0	1	1
2021	0	0	1	3
2022	0	0	0	3
TOTAL	0	1	6	19
PERCENT	0.00	3.85	23.08	73.08

# Crash type and cause statistics

# Crash type

CRASH TYPE	CRASH NUMBERS	% ALL CRASHES
OVERTAKING CRASHES	0	0.00
STRAIGHT ROAD LOST CONTROL/HEAD ON	2	7.69
BEND - LOST CONTROL/HEAD ON	4	15.38
REAR END/OBSTRUCTION	10	38.46
CROSSING/TURNING	9	34.62
PEDESTRIAN CRASHES	1	<mark>3.85</mark>
MISCELLANEOUS CRASHES	0	0.00
TOTAL	26	100.00

### Crash factors

CRASH FACTORS	CRASH NUMBERS	% ALL CRASHES
#N/A	9	34.62

ALCOHOL	1	3.85
DISABLED, OLD AGE OR ILLNESS	1	3.85
FAILED TO GIVE WAY OR STOP	10	38.46
FATIGUE	0	0.00
INCORRECT LANES OR POSITION	6	23.08
MISCELLANEOUS FACTORS	2	7.69
OVERTAKING	0	0.00
PEDESTRIAN FACTORS	0	0.00
POOR HANDLING	3	11.54
POOR JUDGEMENT	4	15.38
POOR OBSERVATION	10	38.46
POSITION ON ROAD	3	11.54
ROAD FACTORS	0	0.00
TRAVEL SPEED	2	7.69
UNKNOWN	0	0.00
VEHICLE FACTORS	0	0.00
WEATHER	0	0.00
TOTAL	51	196.15

### Crashes with:

~			
	FACTOR GROUPS:	CRASH NUMBERS	% ALL CRASHES
	ALL ROAD USER FACTORS	10	38.46
	DRIVER ONLY FACTORS	24	92.31
	PEDESTRIAN FACTORS	0	0.00
	VEHICLE FACTORS	0	0.00
	ROAD FACTORS	0	0.00
	ENVIRONMENT FACTORS	0	0.00
	NO IDENTIFIABLE FACTORS	0	0.00
	RETIRED CODES - NO FUTURE USE	0	0.00
	TOTAL	34	130.77
		1	

Notes:

- Factors are counted once against a crash i.e. two fatigued drivers count as one fatigue crash factor.
- Driver/vehicle factors are not available for non-injury crashes for Northland, Auckland, Waikato and Bay of Plenty before 2007. This will influence numbers and percentages.
- % represents the % of crashes in which the cause factor appears.

### Number of parties in crash

PARTY TYPE	ALL CRASHES	% ALL CRASHES
SINGLE PARTY	1	3.85
MULTIPLE PARTY, INCLUDING PEDESTRIAN	1	3.85
MULTIPLE PARTY, EXCLUDING PEDESTRIAN	24	92.31
TOTAL	26	100.00

### Vulnerable road users

CRASH TYPES	NUMBER	PERCENTAGE (%)
CYCLIST CRASHES	]	3.85
PEDESTRIAN CRASHES	1	3.85
MOTORCYCLE CRASHES	2	7.69

ALL OTHER CRASHES	22	84.62
TOTAL	26	100.00

Notes:

- Some crashes involve more than one vulnerable road user type.
- Motorcycle stats include Mopeds.

### **Road environment statistics**

### Road type

ROAD TYPE	STATE HIGHWAY	LOCAL ROAD	UNKNOWN	N/A	TOTAL	PERCENTAGE (%)
URBAN	0	26	0	0	26	100.00
OPEN	0	0	0	0	0	0.00
UNKNOWN	0	0	0	0	0	0.00
TOTAL	0	26	0	0	26	100.00
PERCENT	0.00	100.00	0.00	0.00	100.00	_

# Natural light conditions

CONDITIONS	INJURY	NON-INJURY	TOTAL	%
LIGHT/OVERCAST	7	16	23	88.46
DARK/TWILIGHT	0	3	3	11.54
UNKNOWN	0	0	0	0.00
TOTAL	7	19	26	100.00

### Conditions

CONDITIONS	INJURY	NON-INJURY	TOTAL	%
DRY	5	15	20	76.92
ICE OR SNOW	0	0	0	0.00
WET	2	3	5	19.23
NULL	0	1	1	3.85
TOTAL	7	19	26	100.00

### Intersection/midblock

CONDITIONS	TOTAL	%
INTERSECTION	23	88.46
MIDBLOCK	3	11.54
TOTAL	26	100.00

### **Objects struck**

OBJECTS STRUCK	INJURY CRASHES	%	NON-INJURY CRASHES	%
CRASHES W/OBJ STRUCK	1	3.85	5	19.23
OBJECT STRUCK	INJURY CRASHES	%	NON-INJURY CRASHES	%

ANIMALS	0	0.00	0	0.00
BRIDGES/TUNNELS	0	0.00	0	0.00
CLIFFS	0	0.00	0	0.00
DEBRIS	0	0.00	0	0.00
EMBANKMENTS	0	0.00	0	0.00
FENCES	1	3.85	1	3.85
GUIDE /GUARD RAILS	0	0.00	0	0.00
HOUSES	0	0.00	0	0.00
TRAFFIC ISLANDS	0	0.00	0	0.00
STREET FURNITURE	0	0.00	1	3.85
KERBING	0	0.00	1	3.85
LANDSLIPS	0	0.00	0	0.00
PARKED VEHICLE	1	3.85	3	11.54
TRAINS	0	0.00	0	0.00
SIGHT RAILS	0	0.00	0	0.00
POLES	1	3.85	1	3.85
STATIONARY	0	0.00	0	0.00
VEHICLE ROADWORK	0	0.00	0	0.00
	-		-	
TRAFFIC SIGN	0	0.00	0	0.00
TREES	0	0.00	0	0.00
DRAINAGE STRUCTURES	0	0.00	0	0.00
DITCHES	0	0.00	0	0.00
OTHER	0	0.00	1	3.85
THROWN OR	0	0.00	1	3.85
DROPPED OBJECTS WATER		0.00	0	0.00
	0		0	0.00
TOTAL	3	_	9	_

Note: % represents the % of crashes in which the object is struck.

# **Overall casualty statistics**

# Injury severity

NUMBER	% ALL CASUALTIES
0	0.00
1	11.11
8	88.89
9	100.00
	0 1 8

# Casualty numbers

YEAR	FATAL	SERIOUS INJURED	MINOR INJURED
2014	0	0	0
2015	0	0	0
2016	0	0	1
2017	0	1	3
2018	0	0	1
2019	0	0	0
	6		

2020	0	0	1
2021	0	0	2
2022	0	0	0
2023	0	0	0
TOTAL	0	1	8
PERCENT	0.00	11.11	88.89

Note: Last 5 years of crashes shown (unless query includes specific date range).

## Casualty types

CASUALTY TYPES	FATALITIES	SERIOUS INJURIES	MINOR INJURIES
CYCLISTS	O	O	1
DRIVERS	0	0	6
MOTORCYCLE PILLIONS	0	0	0
MOTORCYCLE RIDERS	0	1	0
OTHER	0	0	0
PASSENGERS	0	0	1
PEDESTRIANS	O	<mark>0</mark>	<mark>0</mark>
TOTAL	0	1	8

Notes:

- Motorcycle stats include Mopeds.
- for Cyclist casualty numbers, query Road User Type Cyclist, not Vehicle Type Cycle

### **Driver and vehicle statistics**

### Drivers at fault or part fault in injury crashes – by age

AGE	MALE	FEMALE	UNKNOWN	TOTAL	PERCENTAGE (%)
0-4	0	0	0	0	0.00
5-9	0	0	0	0	0.00
10-14	0	0	0	0	0.00
15-19	0	1	0	1	12.50
20-24	1	1	0	2	25.00
25-29	0	0	0	0	0.00
30-34	0	0	0	0	0.00
35-39	0	0	0	0	0.00
40-44	1	0	0	1	12.50
45-49	2	0	0	2	25.00
50-54	0	0	0	0	0.00
55-59	0	0	0	0	0.00
60-64	0	0	0	0	0.00
65-69	0	0	0	0	0.00
70-74	0	0	0	0	0.00
75-79	0	1	0	1	12.50
80-84	0	0	0	0	0.00
85-89	0	0	0	0	0.00
90-94	0	0	0	0	0.00

95-99	0	0	0	0	0.00
100+	0	0	0	0	0.00
	0	0	1	1	12.50
TOTAL	4	3	1	8	100.00
PERCENT	50.00	37.50	12.50	100.00	_

Note: Driver information is not calculated for non-injury crashes.

### Drivers at fault or part fault in injury crashes - by licence

TAGE
TAGE

Note: Driver information is not calculated for non-injury crashes.

## Vehicles involved in injury crashes (vehicle count)

<b>J J</b>	\ /	
VEHICLE TYPE	NO. OF VEHICLES	% OF VEHICLES IN INJURY CRASHES
CAR/WAGON	9	60.00
SUV	0	0.00
VAN	1	6.67
UTE	2	13.33
TRUCK	0	0.00
TRUCK HPMV	O	0.00
BUS	0	0.00
MOTORCYCLE	1	6.67
MOPED	0	0.00
TRAIN	0	0.00
CYCLE	1	6.67
OTHER	0	0.00
UNKNOWN	0	0.00
50 MAX	0	0.00
LEFT SCENE	1	6.67
UNCOUPLED TOWED VEHICLE	0	0.00
TOTAL	15	100.00
	1	

### Vehicles involved in injury crashes (crash count)

VEHICLE TYPE	INJURY CRASHES	% OF INJURY CRASHES
CAR/WAGON	5	71.43
SUV	0	0.00
VAN	1	14.29
UTE	1	14.29

TRUCK	<mark>O</mark>	0.00
TRUCK HPMV	<mark>0</mark>	0.00
BUS	0	0.00
MOTORCYCLE	1	14.29
MOPED	0	0.00
TRAIN	0	0.00
CYCLE	1	14.29
OTHER	0	0.00
UNKNOWN	0	0.00
50 MAX	0	0.00
LEFT SCENE	1	14.29
UNCOUPLED TOWED VEHICLE	0	0.00
TOTAL	10	142.86

## Vehicles usage in injury crashes

VEHICLE USAGE	FATAL CRASH	SERIOUS CRASH	MINOR CRASH	TOTAL	PERCENTAGE (%)
PRIVATE	0	2	5	7	46.67
ATTENUATOR TRUCK	0	0	0	0	0.00
AGRICULTURAL	0	0	0	0	0.00
AMBULANCE	0	0	0	0	0.00
CAMPERVAN	0	0	0	0	0.00
CONCRETE MIXER	0	0	0	0	0.00
FIRE	0	0	0	0	0.00
LOGGING TRUCK	0	0	0	0	0.00
MOBILE CRANE	0	0	0	0	0.00
POLICE	0	0	0	0	0.00
RENTAL	0	0	0	0	0.00
ROAD WORKING	0	0	0	0	0.00
SCHEDULED SERVICE BUS	0	0	0	0	0.00
SCHOOL BUS	0	0	0	0	0.00
TANKER	0	0	0	0	0.00
TAXI	0	0	0	0	0.00
TOUR BUS	0	0	0	0	0.00
TRADE PERSON	0	0	0	0	0.00
WORK TRAVEL	0	0	0	0	0.00
WORK VEHICLE	0	0	0	0	0.00
OTHER	0	0	0	0	0.00
NULL	0	0	8	8	53.33
TOTAL	0	2	13	15	100.00
PERCENT	0.00	13.33	86.67	100.00	_

# Time period statistics

Month by injury/ non-injury crashes

MONTH	INJURY CRASHES	%	NON- INJURY CRASHES	%	TOTAL	%
JAN	1	14.29	2	10.53	3	11.54
FEB	2	28.57	2	10.53	4	15.38
MAR	0	0.00	2	10.53	2	7.69
APR	1	14.29	1	5.26	2	7.69
MAY	0	0.00	0	0.00	0	0.00
JUN	0	0.00	2	10.53	2	7.69
JUL	0	0.00	2	10.53	2	7.69
AUG	1	14.29	2	10.53	3	11.54
SEP	1	14.29	2	10.53	3	11.54
OCT	0	0.00	2	10.53	2	7.69
NOV	0	0.00	2	10.53	2	7.69
DEC	1	14.29	0	0.00	1	3.85
TOTAL	7	100.00	19	100.00	26	100.00

# Day/period

DAY/PERIOD	ALL CRASHES	% ALL CRASHES
WEEKDAY	18	69.23
WEEKEND	8	30.77
TOTAL	26	100.00
	1	

# Day/period by hour

DAY/ PERIOD	00:00 -	03:00 -	06:00 -	09:00 - 11:59	12:00 -	15:00 -	18:00 -	21:00 -	TOTAL
	02:59	05:59	08:59		14:59	17:59	20:59	23:59	
WEEKDAY	0	0	<mark>2</mark>	2	4	<mark>9</mark>	1	0	18
WEEKEND	1	0	0	2	٦	2	1	0	7
TOTAL	1	0	2	4	5	11	2	0	25

# Day/period by hour DOW

DAY/ PERIOD	00:00	03:00	06:00	09:00 - 11:59	12:00 -	15:00 -	18:00 -	21:00 -	TOTAL
T EIGE	02:59	05:59	08:59	11.55	14:59	17:59	20:59	23:59	
MON	1	0	<mark>0</mark>	0	0	<mark>1</mark>	0	0	2
TUE	0	0	1	0	1	<mark>2</mark>	0	0	4
WED	0	0	1	0	1	1	1	0	4
THU	0	0	<mark>0</mark>	1	2	<mark>4</mark>	0	0	7
FRI	0	0	<mark>0</mark>	1	0	1	1	0	3
SAT	0	0	0	0	1	1	0	0	2
SUN	0	0	0	2	0	1	0	0	3
TOTAL	1	0	2	4	5	11	2	0	25
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Appendix C Eastern Hills Reservoir Post Hearing Ecology Memorandum

# vsp

# Memorandum

То	Ezekiel Hudspith, Dentons
Сору	Wellington Water Ltd
From	Mark Hansen
Office	Christchurch
Date	17 December 2024
File/Ref	3-WW021.02
Subject	Eastern Hills Reservoir Post Hearing Ecology Memorandum

This ecological memorandum is intended to provide clarity on several points that were raised during the Notice of Requirement hearing ('the hearing').

### Management Plan Hierarchy

During the hearing and upon final refinement of the consent conditions, it became evident there needed to be clarity regarding how the management plans interact. Consent condition wording was improved upon (through discussions between me, Ms Cathy Crooks and the Wellington Water project team), and a condition was added to give effect to the hierarchy in which the plans must have in priority. Due to potential disturbance or death of protected wildlife (and prohibitions of this under the Wildlife Act 1953), it was considered that wildlife management requirements have precedence over vegetation, landscape and visual impact management.

A Wildlife Act Authority (WAA) is required from the Department of Conservation (DOC) to enable the trapping, handling and relocation of protected lizards from the Project site. The Lizard Management Plan (LMP), forms part of and completes that WAA. The management, mitigation and remediation outlined within the LMP, therefore must be implemented to ensure the conservation outcomes, for which the authority is granted. The WAA will, when issued, authorise disturbance and, while not intended, it will also authorise the incidental<sup>1</sup> (Project related) death of protected lizards. The LMP will outline key factors that must be adhered to, to reduce the significant risk to lizards, which are not highly mobile and less able to evade construction works. For example, the LMP will require avoidance of habitat impacts during winter when lizards are in brumation and more predisposed to injury or death. The LMP also outlines the required habitat remediation specific for lizards. Although the LMP lacks fine level details, (plant species, densities, natural cover object (logs) placement etc), it is agreed by DOC that those areas will be designed to be suitable for the lizard species on-site and will have herpetologist input to ensure that outcome.

<sup>&</sup>lt;sup>1</sup> The Department of Conservation Permissions team have recently provided clarity on definitions and what they can authorise. Accidental death cannot be authorised by the Director General, while deliberate and incidental death can. Deliberate death includes euthanasia, incidental death includes Project related but non-deliberate death, typically after suitable management has been implemented and yet there is a very small residual level of risk (e.g.: lizards within vegetation during habitat clearance after trapping has been completed) and accidental death is a situation where a protected species is accidentally struck, such as on public roads.

In addition to avoiding harm to lizards being a primary consideration in terms of the ecological effects of the Project, as an administrative matter it would also be much more difficult to amend the LMP (as part of the WAA) to reflect the other management plans (prepared under the RMA), than the other way around. For these reasons it was considered that as a starting point the conditions should require the other ecological management plans to be consistent with the LMP.

The Bird Management Plan (BMP) to be prepared under the designation conditions avoids the need for a Wildlife Act Authority as the Project does not intend to disturb or deliberately / incidentally kill protected birds, and the Project can adequately avoid immobile and vulnerable eggs and chicks within nests (if found to be present) through appropriate buffer zones which habitat clearance and construction works will be required to avoid. Typically, birds do not nest in autumn and winter, and ideally habitat clearance would occur during this period to avoid impacts on birds (i.e. without the need for buffer zones), however this is when lizards are most at risk and DOC does not authorise trapping or lizard habitat impacts during this period. The requirement to manage the risk to protected birds therefore comes secondary to lizards. The BMP will outline the species, their nesting habitats, and their active nest periods. The pre-works surveys for active nests will appropriately manage the risk to protected birds, when performed concurrently with lizard salvage and associated habitat clearance.

A Vegetation Management Plan (VMP), as outlined within the Ecological Impact Assessment (EcIA), is required to outline the salvage and reuse of vegetation (logs/branches) on-site to remediate / create habitat for lizards, terrestrial invertebrates and to mitigate effects to adjacent waterways. The VMP and the Landscape Concept Plan (LCP), perform similar functions to mitigate differing Project effects. Given the closely related subject matter there is a need for integration and consistency between them. The VMP will outline requirements to manage effects from an ecological perspective, while the LCP will outline specific plant species, planting densities and areas to ensure habitats are remediated and landscape and visual impacts are mitigated. The LCP must, however, achieve the ecological effects management to ensure the residual levels of ecological effect as expected within the EcIA and therefore must come after and be guided by the VMP and the BMP and LMP.

In summary the hierarchy of management plans must be as follows, in order to ensure the residual levels of effect for ecology are achieved, and to achieve the outcomes required for landscape and visual effects:

- 1. Lizard Management Plan
- 2. Bird Management Plan
- 3. Vegetation Management Plan
- 4. Landscape Concept Plan
- 5. Construction Management Plan etc

I believe the updated Consent Conditions reflect the above appropriately.

#### Mānuka seed collection

I do not consider that the suggestion by Hutt City Council's Landscape and Visual Effects peer reviewer for the conditions to direct the collection of mānuka seed for site remediation is required.

The "mānuka/kānuka" ecotone on-site was applied as it is the term used within the Landcover Database V5.0. There is very little, if any, mānuka on-site and the ecotone is dominated by kānuka, which may not be clear to anyone not overly familiar with the site. Secondly, the time for seed ripeness may be very limited and could cause delays to vegetation clearance if Conditions were imposed around on-site ripe seed collection. Kānuka usually flowers once a year, from late spring to mid-summer (September to February), but strongly from December onwards. Mānuka flowers most prolifically in late spring (October/November) and irregularly throughout the year.

Should "mānuka/kānuka" habitat clearance be conditional on seed ripeness, this could cause time constraints on habitat clearance for lizards, likely into late summer/autumn which may reduce the available time to achieve lizard salvage before unfavourable weather could halt works, delaying the Project. Site remediation can be achieved appropriately through ecosourced plants from a nursery and is not dependent on on-site seed collection.

Overall, while I agree it would make sense to utilise mānuka seed from the site if available (and subject to timing etc), in the circumstances I do not consider this is a matter that needs to be addressed in the designation conditions.

### **Remediation Planting Ratios**

When asked about the ratio in which to remediate the site, I was unclear about the question. I realised the context of the question when the Commissioner asked the same question to the peer review ecologist. I suspect my response of "100% of the area able to be remediated on-site must be", was not quite answering the question posed.

Previously with ecological remediation works a ratio has been applied where threatened environments or species have been impacted and cannot be appropriately managed. For example, on the West Coast of the South Island, kahikatea (*Dacrycarpus dacrydioides*) is now deemed by DOC to be regionally rare, irrespective of its 'Not Threatened' national threat classification. If a Project on the West Coast required 0.1 ha of kahikatea to be removed, I would recommend a 1:5 ratio, for example, requiring 0.5 ha to be replanted by way of offsetting.

Although the site lies within Significant Natural Resource 12 (SNR12), and for the purposes of this Project, we deemed this to be a Significant Natural Area (SNA), the National Policy Statement for Indigenous Biodiversity (NPS-IB) has provided a National Policy for consistent application. The NPS-IB clearly states that only after avoidance, mitigation and remediation if the effects are more than minor, then biodiversity offsetting is required.

For completeness, I do not believe a ratio for remediation is an appropriate condition. As we do not yet know the area of vegetation impact until it occurs (after detailed design has been completed the Contractor may not need to remove all vegetation within the Project boundary), simply remediating all available areas on-site (i.e. 100% of the area able to be remediated, consistent with my answer at the hearing) is sufficient to ensure effects are not more than minor, without the need for offsetting where a ratio would be appropriate. The revised conditions now more clearly require that all areas where vegetation is lost are required to be replanted, if remediation is able to occur in that location.

Ms Roberts has, in her evidence in chief and witness testimony, used a variety of terms to describe the tree planting and weed management actions she is proposing, including "offsetting", "compensation", "enhancement", "restoration", and in the updated proposed conditions (dated 13 December 2024) "enrichment replanting". In my view this has the potential to create confusion.

While there is a very small area of permanent loss of habitat and smaller amount of indigenous vegetation lost, this is not more than minor and therefore, when applying the NPS-IB, offsetting is not a requirement.

Furthermore, the vegetation is highly modified, vegetation and habitats highly impacted by pests and weeds and is not a threatened environment, nor is the ecotone regionally rare or threatened, and does not meet significance criteria. Accordingly, I do not consider that a ratio is appropriate by way of remediation in these circumstances. The revised consent conditions clearly set out the requirements to calculate the areas of vegetation impacted, and state that remediation must be implemented in all possible areas.

A requirement to have a 1 : >1 ratio (i.e. replacing a greater area than what is removed) would likely set an unreasonable precedent for offsetting that is not consistent with the NPS-IB (i.e. it would require offsetting for 'not more than minor' residual effects, in this context).

For completeness and to put these effects in context, I consider that even if all vegetation on the site were to be permanently lost, then, the loss of vegetation and habitats, in the spatial scale of SNR12, would likely still not reach the "more than minor" threshold that requires offsetting under the NPS-IB. The natural regeneration would likely be slow, and it may result in a long-term or permanent effect, however the ecological function, linkage, connectivity etc impacts would be negligible due to the site's shape and location on the edge of SNR12 (i.e.: the loss of vegetation would not have a significant effect on ecological connectivity or linkage), and the very small percentage that the site makes up of SNR12.

#### Biodiversity Offsetting via offsite spraying of weeds

Notwithstanding the above clarification regarding biodiversity offsetting requirements, during her witness testimony, I noted that Ms Roberts suggested an option of using glyphosate to spray weeds off-site. For completeness I would have concerns with that approach.

A study on the effect of two glyphosate formulations on northern grass skink by Carpenter et. al., (2016)<sup>2</sup> shows glyphosate herbicide (Roundup) caused heat-seeking behaviour. Yu et. al. (2023)<sup>3</sup> also concluded that glyphosate-based herbicide treated lizards suffered from oxidative damage to the brain tissue and abnormal histidine metabolism, thus their thermoregulation accuracy was reduced. These studies demonstrate negative effects to lizards, which ultimately cause them to seek areas of high temperature, such as open areas in full sun. Furthermore, formulations that contain the surfactant polyethoxylated tallow amine may cause slower sprint speeds<sup>4</sup>. Increased basking behaviour and lethargy, caused by glyphosate herbicide would significantly predispose lizards to being preyed upon. Glyphosate herbicide use is therefore strongly discouraged in lizard habitats. Also, spraying areas of gorse off-site would cause further lizard habitat loss, defined as leakage in the NPS-IB. The Biodiversity Offsetting Principles state "biodiversity offset design, and implementation <u>avoids displacing harm to other indigenous biodiversity</u> in the same or any other location."

# Hutt City Council Comments and suggested amendments to Proposed Conditions (13 December 2024)

Following the conditions proposed on 5 December 2024, comments and suggested amendments were received from Hutt City Council (HCC) on 13 December 2024. I have reviewed this latest draft condition set, and any change or new condition which is not commented upon below should be considered to be supported by me.

Although not all matters raised in paragraphs are being responded to here, I feel the need to highlight a few key points.

#### Responses to specific paragraphs in 13 December 2024 HCC comments document

Paragraph (10): The permanent change in vegetation character over the pipeline alignment has been clearly outlined within the Ecological Impact Assessment and identified in the Landscape Concept Plan. The residual levels of effect and associated "not more than minor" assessment took this into account, therefore no ecological effect would change to "more than minor" (which is what HCC suggests could happen). As the first step in the mitigation hierarchy is avoidance, if the Contractor can avoid any impacts to existing trees, they will do so, and only remediate the impact areas following the Landscape Concept Plan of low growing shrubs over the pipeline alignment etc.

<sup>&</sup>lt;sup>2</sup> https://link.springer.com/article/10.1007/s10646-016-1613-2

<sup>&</sup>lt;sup>3</sup> https://www.sciencedirect.com/science/article/abs/pii/S0048969723039104

<sup>&</sup>lt;sup>4</sup> <u>https://www.reptiles.org.nz/news/2013/effects-glyphosate-based-herbicides-lizards</u>

Paragraph (11): This statement (that birds can nest anywhere) is incorrect. Habitat suitability is critical for nest development (e.g. kererū do not nest in small shrubs such as the "mānuka/kānuka" on the firebreak track edge). By clearly demarcating, in the BMP, the habitats that the various protected birds that may nest on-site it will guide accurate pre-works surveys for nests.

Paragraph (12): The explanation about regarding paragraph 11 should provide clarity for paragraph 12.

Paragraph (13): The zones of influence and buffer zones were clearly defined in the Ecological Impact Assessment. They are effectively the same thing but serve different purposes. For clarity, should 'Threatened' birds receive a 50 m zone of influence/buffer zone, this requires pre-works surveys out to 50 m beyond vegetation clearance / construction activities. Then, if an active nest is confirmed on-site or within that zone of influence, a 50 m buffer is placed around that active nest, where vegetation clearance and construction activities are to be excluded until chicks fledge or the nest naturally fails.

Paragraph (16): I am surprised by the suggestion that this condition should now <u>only</u> relate to ruru/morepork. The previously agreed condition covered all possible, likely or highly likely cavity nesters that may nest on-site. The changes suggested by HCC now would offer protection to Nationally and Regionally 'Not Threatened' ruru only. I disagree with this approach and recommend maintaining the previous condition for all cavity nesters.

#### Comments on HCC amendments to Conditions

- 36. c) I disagree with the removal of this clause. Not all species of bird nest in all vegetation (e.g.: the regenerating "mānuka/kānuka" along the firebreak track does not provide suitable nesting habitat for kererū). By clearly defining the vegetation types that provide nesting habitat for species defined in 36. b), it provides clarity for areas to avoid during those species' active nest periods and/or refines where pre-works surveys must occur.
- 36. g) I have considered the proposed edits and other proposed / edited conditions and now provided a refined clause regarding clear demarcation methods.
- 36. h) I disagree with 25 m buffer zones for all 'Not Threatened' birds and 200 m for kārearea. This condition neglects 'Introduced and Naturalised' yet protected birds, and some 'Not Threatened' species are not adversely affected by human / construction activities. A 25 m buffer may result in unnecessary Project restrictions, likewise a 200 m buffer for karearea is not required. A 50 m buffer zone for all 'At Risk' and 'Threatened' species expected or possible to nest on-site is sufficient. I have now provided a refined clause.
- 36. j) I disagree with the suggested change here. As noted above, restricting this condition to only ruru would undermine previously raised cavity nesters such as kākāriki. I have now provided a refined clause.
- 38. I) I disagree with the suggested reference to offsite enhancement and enrichment replanting (or offsetting). Exotic species removal and replanting is yet another term for offsetting which is not required for a 'not more than minor' residual level of effect after avoiding, minimising and remediation of the site, pursuant to the NPS-IB.

#### Conclusion

While weed and pest control within SNR12 should be conducted by the HCC as a matter of course, in order to maintain, preserve and enhance biodiversity within SNR12, it is my opinion that it is not a requirement of this Project pursuant to the Resource Management Act 1991, nor the NPS-IB. Biodiversity offsetting is therefore not deemed necessary to be included within Consent Conditions nor the VMP. The request from the ecology peer review for offsetting (compensation, off-site enhancement, restoration, enrichment replanting or any other term

for additional works outside the Project site) appears to be a conservative approach to a 'no net loss' or 'quantitative net gain' outcome of personal opinion, that is not a requirement under legislation. Conditions were revised to provide clarity, as requested by the Commissioner. I have agreed with some suggested edits and disagreed with others, especially where edits eroded the protection that conditions provide protected species.

Yours sincerely,

yaa

Mark Hansen Principal Ecologist