

IN THE MATTER of the Resource Management Act 1991 ("RMA" or "the Act")

AND

IN THE MATTER of a submission by **AMBURY PROPERTIES LIMITED** in respect of the **PROPOSED WAIKATO DISTRICT PLAN** pursuant to Clause 6 of Schedule 1 of the Act seeking the rezoning of land at Ohinewai

SUMMARY STATEMENT OF CHAD CROFT IN RESPECT OF ECOLOGY IN PREPARATION FOR EXPERT CONFERENCING

1. INTRODUCTION

- 1.1 My name is Chad Croft. I am a Principal Ecologist employed by Ecology New Zealand. I have been advising Ambury Properties Limited in relation to ecological issues ~~on~~ its submission seeking a rezoning of land at Ohinewai.
- 1.2 I managed the preparation of an initial ecological opportunities and constraints assessment, and an ecological impact assessment for Stage 1 of the development. I have participated in a project hui and presented a summary of the ecological constraints and opportunities to the local iwi, and participated in a local community information transfer session.
- 1.3 I will be presenting expert evidence at the hearing of the Ohinewai submissions. That evidence is due in July 2020. In the meantime, this statement has been prepared in preparation for expert conferencing in relation to ecology that has been scheduled for the week commencing 15 June 2020 ~~[XX] June 2020~~, in compliance with the direction from the Hearing Panel that APL is to provide a summary of its position on the topics that are to be the subject of expert conferencing.

Scope of statement

- 1.4 As a basis for expert conferencing, this statement will:
- (a) Identify what I see as being the key issues for determination in relation to ecology and set out my expert opinion on that issue and the reasons for my views (Section 2); and
 - (b) Set out my core conclusions (Section 3).

Expert Witness Code of Conduct

- 1.5 I have read the Code of Conduct for Expert Witnesses, contained in the Environment Court Consolidated Practice Note (2014) and I agree to comply with it. I can confirm that the issues addressed in this statement are within my area of expertise and that in preparing my statement I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2. KEY ISSUES RELEVANT TO ECOLOGY AND MY OPINION ON THESE ISSUES

- 2.1 I have worked with Mr Olliver and others to identify the key issues that need to be determined in relation to ecology. The purpose of this section is to set out the issue and then my expert opinion in relation to that issues, and the reasons for my opinion.

Ecological values

- 2.2 The key issue here is whether the ecological values of the Ohinewai Structure Plan area are accurately identified in the Ecological Impact Assessment for the Ohinewai Structure Plan (including the supplementary memorandum dated 9 April 2020).²

- 2.3 In my opinion, they are for the following reasons:

- (a) ~~I~~We have assessed the values present using industry best practice methods within the constraints of current land use and access to the site, as well as critical timing windows for the detection of species such as long tail bats and black mudfish.
- (b) ~~Values have been assessed by ecologists who I am~~are qualified and experienced in identifying indigenous terrestrial and freshwater fauna, flora and habitat and assessing their values [JO1].
- (c) The site is a highly modified agricultural landscape with no remnant indigenous vegetation. The site's current condition is reflective of

historical farming operation, with an abundance of pasture grass, an extensive network of farm drainage channels, the absence of indigenous vegetation communities and an abundance of exotic vegetation cover. ~~Nearly a~~ 100% of the site is currently used as grazing pasture.

- (d) Ecological values were assigned in accordance with the four matters prescribed in the EIANZ guidelines (2018). The overall values assess the matters at an ecosystem/vegetation type, fauna habitat and species level.
- (e) Identification of values was done in the context of the wider landscape

Impact on Lake Rotokawau and Lake Waikare

2.4 What impact will development of the Ohinewai Structure Plan area have on the ecological values of Lake Rotokawau and Lake Waikare

2.5 In my opinion, the impact of development is likely to be:

- (a) Changes to the hydro regime associated with stormwater collection, conveyance, treatment and discharge.
- (b) A positive change in the quality of water being discharged to Lake Rotokawau and Lake Waikare. The change in land use to ~~an~~ industrial, commercial and residential zones will result in an altered stormwater runoff regime. The proposed stormwater management system for the development incorporates a toolbox approach including a 'treatment train' philosophy which aims to ensure stormwater discharged from the site achieves appropriate water quality standards, is consistent with the statutory framework and meets stakeholder's expectations, ~~i.e.~~ including a reduction in nutrient contamination (e.g. nitrogen and phosphorus) of surface and groundwater as well as nutrient loading of Lake Rotokawau, Lake Waikare and ultimately Whangamarino wetland. The stormwater management options outlined in the Woods Stormwater management plan (SMP), include; a combination of at source treatment devices; conveyance along open, vegetated swales and discharge to naturalised wetland features prior to leaving the site and entering the receiving environment.
- (c) Increased availability and abundance of wetland habitat for wetland dependent indigenous flora and fauna.

- (d) A positive change in the wetland habitat abundance and quality surrounding Lake Rotokawau through the restoration of adjacent wetland area, including the planting of indigenous wetland vegetation communities and the implementation of pest plant and animal control programs.
- (e) The proposed structure plan provides for a significant re-allocation of approximately 55ha of land to be managed as open space, comprising of a mix of functional stormwater management areas, recreational opportunities, and wetland park. This will create an ecological buffer adjacent to the SNA surrounding Lake Rotokawau and has the unique potential of reversing current degradation and potentially expanding the conservation estate through negotiated agreements or partnerships with the Department of Conservation (DOC) and/ or other stakeholders.

Whangamarino wetland

- 2.6 What impact will the development of the Ohinewai Structure Plan area have on the ecological values of the Whangamarino wetland?
- 2.7 In my opinion, the impact is likely to be:
 - (a) A positive impact on the overall water quality being discharged to Lake Rotokawau, Lake Waikere and therefore Whangamarino wetland.
 - (b) A positive impact on wetland habitat availability and function including greater connectivity between the site, Lake Rotokawau, Lake Waikere and therefore the Whangamarino wetland complex

Terrestrial biodiversity

- 2.8 What impact will development of the Ohinewai Structure Plan area have on terrestrial biodiversity in the Ohinewai Structure Plan area, including impact on bats?
- 2.9 In my opinion, the impact is likely to be:
 - (a) Minor. The overall, mitigated terrestrial effects were considered to range from very low (vegetation/ecosystems) to low (fauna habitat and species) in accordance with the EIANZ guidelines. This was based on the moderate quality terrestrial habitat values present across the site, the low level of long tail bat activity detected across

the site, the type of bat activity detected (commuting) and the implementation of lizard and bat management plans prior to any vegetation removal or earthworks

Freshwater ecology

- 2.10 What impact will development of the Ohinewai Structure Plan area have on freshwater ecology in the Ohinewai Structure Plan area?
- 2.11 In my opinion, they are likely to be:
- (a) Minor. The overall, mitigated freshwater effects were considered low for both a freshwater habitat functionality and species perspective in accordance with the EIANZ guidelines. This was based on the low quality habitat present within the existing farm drains to be impacted, the low probability of black mudfish presence and the implementation of fish management protocols prior to any earthworks and instream disturbance.

Rules or covenants on landowners

- 2.12 Are the ecological values significant enough to justify rules or covenants prohibiting landowners in the Ohinewai Structure Plan area owning cats and requiring dogs to always be on a leash?
- 2.13 In my opinion, they do not for the following reasons:
- (a) No nationally threatened or at-risk species were noted utilising the site, with the exception of 4 long tail bat passes detected by two acoustic bat monitors (ABM) spanning a period of 6 minutes in a single night over a 14 day monitoring period. This detection was considered to be representative of a bat commuting across the site
 - (b) No critical nesting or roosting habitat was confirmed within the site. The site provided primarily foraging habitat, for common native and exotic avian species that have adapted to open agricultural landscape areas.
 - (c) While wetland bird species such as caspian tern (*Hydroprogne caspia*) and various shag species (*Phalacrocorax* spp.) are known to utilise the neighbouring Lake Waikere, these threatened and at-risk species are unlikely to be utilising the site for foraging or breeding, but are more likely to use it as a transit pathway.

Matauranga Maori perspective

~~2.14—Do the ecological management proposals address cultural issues and include a Matauranga Maori perspective?~~

~~2.15—In my opinion, they do for the following reasons:~~

~~(a) 2.14 The project design and planning team have engaged [JO2]~~

Potential adverse ecological effects

~~2.16 2.15~~ Do the proposed plan provisions developed by BBO adequately address any potential adverse ecological effects?

~~2.17 2.16~~ In my opinion, they do, for the following reasons:

(a) They include requirements for an Ecological Rehabilitation and Management Plan (ERMP) to be prepared as part of future earthworks consents on the site, which will address the ecological impacts and mitigation measures that I have identified.

3. CONCLUSION

3.1 For the reasons outlined above, and as a result of my broader analysis, there is in my professional opinion no reason on the basis of ecological effects why the rezoning of Ohinewai cannot be approved as proposed.

Chad Donald Croft

~~29/5~~ May 2020