

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Proposed Private Plan Change 2 to
the Hamilton City Operative District
Plan: Te Awa Lakes Private Plan
Change

**STATEMENT OF REPLY EVIDENCE OF BRONWYN PATRICIA RHYND FOR THE APPLICANT
(STORMWATER AND WATER QUALITY)**

1 December 2019

1. INTRODUCTION

1.1 My full name is Bronwyn Patricia Rhynd.

1.2 I have the relevant qualifications and experience as set out in section 2 of my primary evidence.

1.3 I reconfirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and to the extent that I am giving expert evidence, have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in my evidence.

2. SCOPE OF EVIDENCE

2.1 I have been asked to provide evidence in response to the evidence filed on behalf of the following submitters:

- a) Darion Embling on behalf of Waikato Regional Council, in relation to alligator weed management and stormwater issues; and
- b) Michael Martin on behalf of Fonterra Ltd, in relation to comments made in relation to the Stormwater Management Plan I was responsible for preparing.

2.2 I respond to those statements below by reference to the particular paragraphs which require a response.

2.3 In preparing my evidence in reply, I have had the benefit of reviewing the draft evidence of Peter Russell in relation to alligator weed management issues, and the draft evidence of Kori Lentfer and Bernie Milne in relation to industrial feasibility inputs.

3. RESPONSE TO SUBMITTER EVIDENCE

Darion Embling – Waikato Regional Council

Paragraphs 65 to 69

3.1 At paragraphs 65 to 69 of Mr Embling's statement, he points to a perceived gap in the Stormwater Management Plan I prepared as part of the plan change documentation

supporting PPC2 in respect of the treatment of alligator weed, and the availability of mitigation measures to avoid as much as possible the spread of alligator weed off the site via the stormwater management system.

3.2 The Stormwater Management Plan has a different focus to the other plan material put forward on alligator weed management, including the Alligator Weed Management Report provided by Mr Russell, along with the Weed Hygiene Plan and the proposals for future Alligator Weed Management Plans at the time Land Development Plan consents are sought. In addition, I understand from Mr Russell that the Applicant is proposing to eradicate (as far as possible) the alligator weed issues on the site through land development. As such, the Stormwater Management Plan, which largely addresses stormwater management post-development, did not address the treatment of alligator weed through the proposed stormwater systems.

3.3 Having spoken to Mr Russell, in this regard I remain comfortable that these matters can be addressed through a range of options available as part of the LDP consent phase. We have conferred to the best practicable options for the future alligator weed management strategy and implementation plan, which address the following goals:

- a) *Exclusion,*
- b) *Eradication,*
- c) *Progressive containment, and*
- d) *Sustained control*

3.4 These goals prioritise exclusion as being the pre-eminent goal for the Te Awa Lakes Development.

3.5 These goals can be implemented through a management plan which includes the following steps and controls:

- a) *Education and community awareness*
- b) *Monitoring*
- c) *Weed spray and remove*
- d) *Boom barriers*

e) Mesh barrier at outlets

- 3.6 Mesh barriers at the outlet can be designed to allow for fish passage between the recreational lake and the un-named tributary.

Fonterra Ltd – Michael Martin

Paragraphs 3.20 and 3.21

- 3.7 At paragraphs 3.20 and 3.21 of his evidence, Mr Martin makes comments in relation to the relationship (if any) between the industrial feasibility analysis undertaken by the Applicant's civil and geotechnical engineers, which included a proposed stormwater swale, and the Stormwater Management Plan I prepared. At paragraph 3.20, he notes that my Plan states that no stormwater quantity control is required due to the site's proximity to the Waikato River. At paragraph 3.21, he also comments that "stormwater quantity would not need to be provided for an industrial development as per CKL's stormwater management plan".
- 3.8 Mr Martin has confused the purpose of the Stormwater Management Plan with the indicative design prepared by the Applicant's civil and geotechnical engineers for its industrial feasibility analysis. My Stormwater Management Plan relates to the proposed residential and commercial development as indicated in the masterplanned development within the Stormwater Management Plan.
- 3.9 This Stormwater Management Plan implements a strategy to avoid, remedy and mitigate effects of stormwater runoff from the fully developed masterplan for the residential and commercial development.
- 3.10 This Stormwater Management Plan includes best practicable options for conveyance, detention and treatment of stormwater through a range of systems, including pipelines and swales, at-source biofiltration, wetlands, proprietary devices and large man-made lakes proposed as part of the Te Awa Lakes development. This bears no correlation to the indicative design for the stormwater swale shown on the plans attached to the industrial feasibility analysis. As such, the paragraphs of the Stormwater Management Plan are not relevant to the analysis Mr Martin was requested to undertake by Fonterra.

3.11 A stormwater management plan was not developed for the industrial scheme plan which has been presented in the industrial feasibility analysis. A stormwater management plan for an industrial development, whilst applying the same management strategy, could have included vastly different best practicable options than that for the Te Awa Lakes Stormwater Management Plan.

4. CONCLUSION

4.1 In conclusion, I believe I have addressed Mr Embling's query following discussions with Mr Russell for the Applicant. Mr Martin's comments in relation to my Stormwater Management Plan are not applicable to the industrial feasibility analysis that his evidence is concerned with.

Bronwyn Rhynd

1st December 2019

