

Before the Hamilton City Council Hearings Panel

Under the Resource Management Act 1991 (the **RMA**)

In the matter of a submission by the Waikato Regional Council (submitter reference 41) on Private Plan Change 2 -Te Awa Lakes

And

In the matter of Hamilton City Council District Private Plan Change 2

Summary of evidence of Darion Russell Embling for the Waikato Regional Council

Dated 4 December 2019

- 1 My full name is Darion Russell Embling.
- 2 This statement is a summary of the key matters within my primary statement of evidence dated 11 November 2019.

SUMMARY OF EVIDENCE

- 3 Based on the evidence I have presented, I consider that:
 - a) Neither the applicant nor the Section 42A report have fully recognised the seriousness of alligator weed and the issues it creates for the proposed plan change;
 - b) The proposed plan change will significantly impact on the WRC's ability to achieve the goals of the Waikato RPMP 2014-2024 in relation to alligator weed. This will almost certainly lead to the spread of alligator weed in the Waikato Region;
 - c) Modifications to the proposal will need to be made to remove potential conflicts between water quality, stormwater and alligator weed management outcomes; and
 - d) Modifications to the Alligator Weed Management Plan will be needed to satisfy the information requirements and WRC.

ALLIGATOR WEED

- 4 Alligator weed (*Alternanthera philoxeroides*) is a highly invasive pest plant that is considered as one of the world's worst weeds, a "super weed". It has significant impacts on both the environment and economies. Control of alligator weed is difficult and costly.

PROPOSED MITIGATION OF ALLIGATOR WEED AT TE AWA LAKES SITE IF PLAN CHANGE IS APPROVED

- 5 Perry Group Ltd (**the applicant**) has prepared an Alligator Weed Management Plan that outlines how alligator weed will be managed during the initial construction phase of the development. It includes a Weed Hygiene Plan that identifies what measures will be undertaken to prevent the spread of alligator weed off-site. The Alligator Weed

Management Plan and Weed Hygiene Plan are acceptable to WRC for the construction phase.

- 6 The Management Plan also outlines a number of actions that will be undertaken in an attempt to eradicate alligator weed from the site during the initial construction phase. However, the Management Plan does not include any measures for managing alligator weed after development of the site if the eradication is not successful.

LALE IEREMIA CONCERNS

- 7 Alligator weed fragments can survive buried in the soil for many years. Therefore, alligator weed will be potentially be present under roads, around the foundations of building, in public spaces, throughout the landscaped area, in the community's lawns and gardens in the Te Awa Lakes subdivision. Any type of soil disturbance could result in these plant fragments being brought to the surface and re-growing. This has been observed in the Rototuna subdivision, where alligator weed has continually reappeared over a 20-year period.
- 8 If alligator weed fragments are present in the proposed lakes' sediments or in the soil along the shoreline, they will easily establish and thrive in the proposed lakes.
- 9 My estimated costs of monitoring and controlling alligator weed at Te Awa Lakes are based on the Waikato Regional Council's experience in the Rototuna subdivision and at other urban sites. I consider these costs are a conservative estimate as the sites they are based on are much smaller and have significantly fewer people and activities.

LEGAL SUBMISSION

- 10 Eradication is defined as "The elimination of all live plant parts and viable seeds of a weed from a site". In the context of the Te Awa Lakes subdivision, this means that after control, no alligator weed will be present at the site.
- 11 Mr Russell correctly identified that alligator weed eradication has never been achieved on this scale in the Waikato Region. To my knowledge, eradication of alligator weed has never been achieved on this scale anywhere in New Zealand or overseas.

- 12 The eradication goal is therefore very ambitious. However, the applicant may have access to resources and research to achieve this outcome that council does not.
- 13 Mr Russell has advised us that the alligator weed management document is different to the Alligator Weed Management Plan as described in my written evidence. We would be happy for the applicant to develop an Alligator Weed Management Plan in consultation with us as part a future resource consenting process. The plan would need to include how ongoing management of alligator weed will occur if it is not eradicated during the construction phase of the subdivision.

AREAS OF AGREEMENT WITH THE SECTION 42A REPORT

- 14 The Section 42A report recognises the need for alligator weed management at the site, and I fully support the recommendation accepting the inclusion of controls to stop the spread of alligator weed.

MATTERS NOT AGREED / REQUIRING AMENDMENT RELATIVE TO THE SECTION 42A REPORT

- 15 I have identified three areas of concern in the Proposed Plan Change request and the Section 42A report. These are:
- a) Neither the Request for Private Plan Change report nor the Section 42A report have recognised that there are statutory obligations to manage alligator weed under the Waikato RPMP 2014-2024 prepared under the Biosecurity Act 1993;
 - b) The applicant's Stormwater Management Plan and Lake Water Quality Assessment and Design Approach have not considered the need for managing alligator weed at the Te Awa Lakes site. This issue has not been identified in the Section 42A report; and
 - c) The Proposed Plan Change request and the Section 42A report have not identified information or methods regarding the management and control of alligator weed after development occurs.

OTHER MATTERS

- 16 The goal of eradicating alligator weed during the construction phase is extremely ambitious due to the size and complexity of the site. If the eradication attempt is

unsuccessful, alligator weed will need to be managed across approximately 892 residential properties, the recreational facilities, visitor accommodation, parks, roads, mixed use precinct and the day-to-day comings and goings of thousands of people. The risk of alligator weed being spread off the Te Awa Lakes site will be significantly increased. To prevent this, there will need to be ongoing alligator weed control and restrictions on the activities future residents can undertake on their properties.

CONCLUSION

- 17 Overall, I continue to support the WRC's submission opposing the plan change from a biosecurity perspective. The number of individual properties, residents, visitors and businesses manifestly increases the risk that alligator weed will be transported off the site. This will compromise the WRC's commitment to biosecurity and likely have negative effects on native biodiversity and the economy.



Darion Russell Embling

27 November 2019