Before the Selwyn District Council

*under:* the Resource Management Act 1991

*in the matter of:* Proposed Private Plan Change 69 to the Operative District Plan: Lincoln South

*and:* **Rolleston Industrial Developments Limited**
*Applicant*

# Summary of Evidence of Laura Drummond (Ecology)

Dated: 24 November 2021

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## SUMMARY OF EVIDENCE OF LAURA DRUMMOND

## INTRODUCTION

1 My name is Laura Drummond and I am a Technical Director – Ecology at the environmental consulting firm Pattle Delamore Partners Ltd (PDP). My experience and qualifications are set out in my primary statement of evidence (dated 4 November 2021).

2 I have been engaged by the Applicant to comment on the potential mitigation options that can be provided to minimise impacts of the proposed land use change to aquatic values within the proposed site.

## SUMMARY OF EVIDENCE

3 Within the proposed private plan change site, two clusters of springs (referred to as spring fields) have been verified through field surveys by Aquatic Ecology Limited (AEL). Springs Creek, which flows from northwest to southeast across the site, has a high level of springs associated with its headwaters within the gardens of Chudleigh Homestead. There is also a spring field located in the low-lying south-eastern corner of the site, as detailed in the evidence of **Mr Taylor** and shown in Figure 1 of my primary statement of evidence.

4 I have reviewed the section 42a ecology report and agree that the springs within the site are of high ecological value and need to be protected as part of the Plan Change. I agree that spring flows are highly sensitive to urban development but consider that with careful design at the time of subdivision, including mitigation in areas of shallow groundwater to avoid redirecting groundwater flow paths away from springs (as discussed in the evidence of **Mr Veendrick** and **Mr. McLeod**) and appropriate setback distances for earthworks and development (as discussed in the evidence of **Mr Taylor**), the ecological values of the springs can be maintained.

5 I consider that with the modifications now included in the amended ODP, the proposed land use change provides an opportunity to restore the current condition of waterways, springs and associated wetlands located on the site, which are within an active dairy and sheep farming operation. This can be achieved through careful design and enhancement of natural areas within the site, including the spring-fed headwaters of Spring Creek, isolated spring heads and the lowland area to the east of the site which has potential for wetland restoration. An Ecological Management Plan for the site is proposed to enable controls on proposed protection, enhancement and ongoing maintenance and monitoring of aquatic features on site.

6 Further discussion with **Dr Burrell** since my primary evidence was submitted has resulted in a proposed update to the ODP regarding spring head setbacks. It is now proposed that a 100m setback from the spring heads verified by AEL is adopted. This will be adopted through the new clause (d) that would require *'a 100m setback for earthworks and buildings from the spring heads identified in Figure 1'*.

**ADDITIONAL CONSIDERATIONS**

7 Discussion with Dr Burrell confirms that he is very happy with the updated approach to protect springs on the site, including the 100m setback and Ecological Management Plan. Minor updates to the ODP text were proposed by **Dr Burrell**, as set out below, which I agree should be incorporated:

7.1 An update to clause b(i) in the waterbodies and freshwater ecosystems section to include "and related soil and hydrology tools and any updates to the MfE delineation protocols" and removal of the wording "and associated buffer distances to be implemented".

7.2 An update to clause b(iii) to remove the 30 m from permanent springheads, as this is covered by clause d.

**CONCLUSION**

8 It is considered that clause d will provide assurance that if works (e.g. earthworks, buildings) are to be located within this 100m setback, resource consent will be required. The resource consent process will allow for more detailed consideration of the potential impacts or merits of proposed activities within the 100m setback, including hydrological impacts. I also note that a detailed wetland delineation assessment following the Ministry for the Environment wetland delineation protocols[1] will be required to confirm potential 'natural inland wetlands' on-site which provides additional assurance that these natural features will be considered at the resource consent stage.

9 It is my opinion that with careful subdivision design a net ecological betterment at the site is achievable, when compared to current conditions. To achieve this, changes to the submitted ODP have been adopted including an increase in reserve/wetland space, relocation of stormwater areas away from flood prone areas and spring heads, and provision of minimum aquatic setbacks (100m for spring heads, 20m for Springs Creek, 10m for all other modified watercourses). Consultation with council ecologists and iwi partners

[1] Ministry for the Environment 2020. Wetland delineation protocols. Ministry for the Environment, Wellington. No. 10 p.

will also be required as part of the future subdivision consent application to ensure the areas of high ecological value are protected and enhanced.

10 I am happy to answer any questions concerning my evidence or the proposed conditions.

Dated: 24 November 2021

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Laura Drummond