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17 November 2025

Tim Carter Carter Group Limited 166 Cashel Street **CHRISTCHURCH 8011** 

Dear Tim,

# SECTION 55 APPLICANT RESPONSE TO RYANS ROAD FAST-TRACK COMMENTS – ECOLOGY **MATTERS**

#### 1.0 **Declaration and Qualifications**

My full name is Jarred Bradley Arthur

I am employed as a Technical Director - Ecology with Pattle Delamore Partners Limited (PDP) and have been in that role since January 2024. Prior to this, I worked for eight years as a Water Quality and Ecology Scientist at Canterbury Regional Council (CRC). I also held the role of Freshwater Ecologist at Ryder Consulting Limited between 2011 and 2016.

I hold the qualifications of Master of Science (Hons) in Ecology and Bachelor of Science in Biology from the University of Canterbury. I am a member of the New Zealand Freshwater Sciences Society. I have 15 years of experience working as an environmental scientist specialising in aquatic ecology.

In my consulting and public sector roles, I have reviewed and written technical assessments on the impacts of land and water use activities on freshwater and terrestrial ecosystems. These include assessments related to agricultural, industrial and urban land use practises, including water takes, stream diversions and stormwater discharges to land and water. Recently, at PDP, I have overseen and technically supported ecological assessments related to effects on aquatic, avifauna, herpetofauna and vegetation values.

In my past role at the CRC, I advised planning, consents and compliance staff on technical matters relating to water quality and freshwater ecosystems. This included working for several years on the development of Plan Change 7 to the Canterbury Land and Water Regional Plan (LWRP). A component of this was Chapter 8 of the LWRP, which set water quality limits and targets, and ecosystem outcomes for the Waimakariri Zone. I spent time undertaking field surveys and ecological investigations of rivers throughout the Canterbury Region.

I have been asked by Carter Group Limited (CGL) to provide a response to ecological matters contained in written comments on the Ryans Road Industrial Development application from persons invited by the Panel to comment under section 53 of the Act. In particular, I address queries relating to the management and protection of:





- a) indigenous lizard populations;
- b) threatened vegetation, specifically Geranium retrorsum; and
- c) aquatic values in the Ryans Road water race.

I have also adopted the expert advice of others within my Ecology Team at PDP for matters relating to terrestrial ecosystem values.

Although this is not an Environment Court proceeding, I confirm that have read the Environment Court Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and agree to comply with it. I confirm that the opinions expressed in this statement are within my area of expertise except where I state that I have relied on the evidence of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

## 2.0 Background

PDP prepared several ecological reports for CGL to help inform a Fast-track consent application for an industrial land use development at 104 Ryans Road and 20 Grays Road Christchurch. The application aims to subdivide 55.5 ha of pastoral land for use as industrial warehousing and logistics purposes.

In the planning and development phase of the application, CGL consulted with multiple stakeholders about the proposal. This included liaising with Christchurch City Council (CCC), Selwyn District Council (SDC), Environment Canterbury (ECan), and the Department of Conservation (DOC) on matters regarding waterway, lizard and plant values at the site. The Ryans Road Fast-track application has now been submitted, and CGL has received formal feedback from these parties, who were invited by the Fast-track Panel to comment, on the ecosystem values.

This memorandum outlines recommended responses to feedback on ecosystem values from CCC, SDC, ECan and DOC. Specifically, it outlines matters relating to the management of:

- Lizard populations, including the salvage and translocation of resident individuals at the site;
- The SDC water race that runs adjacent to the development site along Ryans Road; and
- Populations of Geranium retrorsum, an indigenous herb species with a conservation status of 'Threatened – nationally vulnerable'.

The memorandum is structured according to discrete topics of feedback received. It is to be read alongside proposed amendments made in the Lizard Management Plan (LMP; see attached).

## 3.0 Lizard Management

## 3.1 Overview

CCC, ECan, SDC and DOC have provided independent responses regarding the management of lizard populations at the site. Generally, all are supportive of the actions outlined in the LMP, subject to additional conditions requested by DOC in Appendix A of the s51 Wildlife Approval Report. These require supplementary inclusions in the wildlife approval authorisation before it is granted.

#### 3.2 DOC conditions

The conditions from DOC include the following (PDP's response in italics):

- General amendments to the LMP in accordance with the red text highlighted in Appendix A of the s51 report.
  - These requirements are reasonable and have been updated in the LMP.









- The wildlife approval is for the capture, handling, and release of southern grass skinks and McCann's skinks only. Is Contact to be made with DOC Operations Manager for Mahaanui if other species are found.
  - PDP acknowledges that only southern grass skinks and McCann's skinks will be included in the WAA permit. It is reasonable to request that, if discovered, any additional species (particularly those with a higher threat status) be managed differently.
- The incidental killing of southern grass skinks and McCann's skinks is authorised, provided that best efforts are taken to avoid incidental deaths in accordance with the LMP.
  - Incidental injury and/or killing protocols will be included in the project LMP. Despite best
    efforts, lizards may still be injured and/or killed during the works, and therefore, protocols for
    managing these potential circumstances will be included to cover this possibility.
- The actions set out in the habitat enhancement and adaptive management sections of the project's LMP must be implemented. Additionally, a staged approach to enhancement planting will be implemented to maintain adequate habitat.
  - This reinforces what the existing LMP already states and is merely reaffirming this point.
- The wildlife approval authorisation is valid for 10 years from the date of approval.
  - This is reasonable and was discussed previously with DOC. It is within the expected timeframe
    of the site's construction.
- Any changes to the project LMP will require reapproval from DOC and a variation to the project's wildlife approval authorisation before work may recommence.
  - This request is reasonable, but highlight's the importance of having a pragmatic LMP that will still achieve a good level of protection for lizard populations.
- A suitably qualified herpetologist will be presented to DOC for approval before work may commence.
  - A designated project herpetologist is standard practise. However, a condition requiring that the Project Ecologist be approved in writing by DOC is a more pragmatic approach than naming someone at this stage in the process.
- General conditions around capture, handling and relocation protocols
  - This is merely a point of clarification in the existing LMP. Greater detail relating to lizard capture, handling and relocation to minimise the chances of harm to lizards will be in line with best practice methodology. This will include methods described in the DOC biodiversity and monitoring of herpetofauna document, including:
    - Capture, handling and relocation to occur between 1st October and 30th April inclusive.
    - Further details relating to proper lizard trap installation.
    - Equipment cleaning protocols and appropriate lizard transportation methods.
- Lizards that die during the approved activities of catch, transfer or liberate, must result in the notification of DOC and the sending of dead specimens for necropsy.
  - PDP's opinion is that notifying DOC is a reasonable request. It is noted that sending dead
    lizards for necropsy has been included as a condition of other project consents involving lizard
    management procedures. However, PDP's opinion is that it is <u>unreasonable</u> to undertake such
    an exercise in the event of known deaths (e.g., predation during trapping). It is recommended







to include the suggested provisions within the LMP, but highlight that only <u>unexplained deaths</u> (e.g., suspected disease) shall result in specimens sent for necropsy.

- Euthanasia of injured lizards.
  - Seeking advice from the project ecologist is a reasonable request.
- Reporting conditions
  - These conditions are reasonable and include updates to the LMP, which will be made. It is assumed that annual reporting etc. will only occur during the lifetime of trapping, weed management, monitoring and other activities as stated in the LMP.
- · Variations, revocation and costs
  - PDP cannot comment on these conditions, but they appear to be standard practise.

Section 3 of the s51 report also notes that long-term protection of the site is uncertain. No conditions on this matter have been included in Appendix A, however further information relating to the long-term protection of the release site would be beneficial as an inclusion to project LMP.

### 3.3 CCC feedback

The planning assessment of the CCC feedback document states in paragraph 176: "While noting that the timing of the relocation may not allow for establishment of the lizard habitat in accordance with the Department of Conservation's key principles, Christine McClure is supportive of the proposed relocation, including the conditions proposed by DOC."

CCC requested a more detailed timeline of enhancement works at the lizard release site. A timeline of lizard enhancement activities is provided in Appendix C of the LMP and has also been included in Table 1 below.

Table 1. Timeline of lizard habitat enhancement activities				
Year	Activity	Timeframe	Organisation Responsible	
1	Allow grass to grow	Ongoing	N/A	
	Planting preparation	One week prior to enhancement planting	Qualified subcontractor	
	Enhancement planting and eco-pile installation	January 2026	Qualified subcontractor	
	Pest control	Quarterly starting January & February 2026 (for a period of four weeks)	CGL, qualified subcontractor	
	Pre-clearance trap acclimation	February 2026 (four weeks prior to lizard salvage and relocation)	Qualified herpetologist/ecologist	
	Installation of lizard exclusion fence	One week prior to lizard salvage and relocation	Qualified subcontractor	





Table 1. Timeline of lizard habitat enhancement activities				
Year	Activity	Timeframe	Organisation Responsible	
	Lizard salvage and relocation	March 2026	Qualified herpetologist/ecologist	
2	Pest control	Quarterly (for a period of four weeks)	CGL, qualified subcontractor	
	Translocation monitoring	Once between October 2027 to April 2028 inclusive.	Qualified herpetologist/ecologist	

CCC also noted that the DOC best practice for habitat readiness guidelines was not included in the project LMP. Specifically, they stated that the enhancement planting must begin 1-2 years before lizard translocation activities commence. We have not accounted for this timeline in the LMP; however, dense rank grass is present in the area, and livestock have been restricted from grazing the site. Additionally, eco-piles will be created to provide habitat diversity whilst the enhancement plantings are established. These matters were discussed with DOC during the pre-application phase. Additional information relating to staged enhancement planting methodologies stated above will be included in the project LMP.

Lastly, CCC noted that the release site is located adjacent to the Stormwater Management Area (SMA) and was concerned about the flood risk associated with the proximity to the SMA. It is highly unlikely that the release site will flood during high water inputs, as the SMA has been designed to ensure flooding does not occur. Additionally, the lizard release site is found along the outer margin of the area, outside of the highwater zone. More detailed design information relating to the SMA has been included in the project LMP to provide clarity and assurances regarding the flood risks associated with the area.

## 4.0 Geranium retrorsum

Feedback from CCC was in general agreement with findings around indigenous plant species at the project site, including proposed conditions relating to the salvage and reinstatement of *Geranium retrorsum*. ECan provided further feedback, requesting that a maintenance plan be required to ensure translocated plants are maintained in a healthy state. Specific amendments to the wording of conditions are supposedly track changed to condition 26 in Appendix 5 of their response document. However, this is not obvious and therefore PDP has some uncertainty as to what is proposed.

In principle, PDP accepts the notion of a condition requiring the need for ongoing maintenance of the translocated geraniums at the site. A maintenance plan can be prepared by a suitably qualified ecologist or botanist and will detail ongoing management activities and monitoring protocols to ensure the geranium plants are maintained in a healthy condition.

It is suggested that geraniums are monitored and maintained in accordance with other landscape plantings at the site, given that the indigenous plants will form part of the overall landscaping palette. This should be exercised for a duration of two years (24 months).

## 5.0 Waterways

Feedback pertaining to potential effects of the development on the SDC water race has come from ECAN and CCC ecologists. The ECAN ecologist is in general agreement with the proposal and proposed conditions, noting additional requirements limiting the duration of works during culvert installations. It is understood that conditions have been agreed upon between the applicant and ECAN.





More extensive feedback was obtained via the CCC ecologist. In summary, the ecologist believes that more information should be provided prior to granting consent, and that conditions be included as follows (PDP's response in italics):

- The consent holder shall engage a suitable qualified and experienced freshwater ecologist to
  undertake surveys of aquatic ecology values in the 840 m of water race adjacent to the site. This
  shall include targeted searches for freshwater mussels (kākahi). Results shall be entered into the
  NZ Freshwater Fish Database and supplied to the Council's Waterways Ecologist Planner by way of
  email to <a href="mailto:rcmon@ccc.govt.nz">rcmon@ccc.govt.nz</a>.
  - This is a reasonable request and will help inform a robust Fish/Fauna Management Plan (FMP)
    prior to construction works. There does not appear to be any other requirements related to
    this suggested condition.
- The Consent Holder shall engage a suitably qualified freshwater ecologist to oversee design and construction of works within 5 m of the water race and to undertake fish salvage. This shall include providing guidance on culvert location and installation. Results shall be entered into the NZ Freshwater Fish Database and supplied to the Council's Waterways Ecologist Planner by way of email to rcmon@ccc.govt.nz. Written confirmation of the freshwater ecologist's involvement shall be provided to Christchurch City Council Surface Water and Land Drainage Planner and the Waterways Ecologist, by way of email to rcmon@ccc.govt.nz.
  - The requirement of fish salvage is a reasonable requirement and encouraged by PDP as part of construction activities on the water race.
  - Overseeing any on-the-ground works within a 5 m setback of the waterway is considered unreasonable as the implementation of a robust Sediment and Erosion Control Plan would manage effects of adjacent (i.e., not instream) land disturbance works on waterways. It is more understandable to require that an ecologist oversee installation of culverts instream and, depending on construction methodologies, this could be paired to a FMP and salvage.
  - It is considered beyond the scope of an ecologist to inform culvert location and installation as
    these are predominantly engineering matters, although an ecologist can assess placement in
    the waterway bed to ensure compliance with fish passage guidance. This could also be coupled
    with an ecologist review of culvert designs.
- Works within waterways and within 5 m of the banks, including physical in-stream works, erosion and sediment control measures, and fish salvage requirements, must be in accordance with the National works in waterways guideline: Best practice guide for civil infrastructure works and maintenance (Ministry for the Environment, 2021) and CCC guidance <a href="https://ccc.govt.nz/assets/Documents/Consents-and-Licences/construction-requirements/Construction-Environmental-Management/Fish-Salvage-Guidance-for-Works-in-Waterways.pdf">https://ccc.govt.nz/assets/Documents/Consents-and-Licences/construction-requirements/Construction-Environmental-Management/Fish-Salvage-Guidance-for-Works-in-Waterways.pdf</a>.
  - This is standard practise and a reasonable condition for inclusion in the consent.
- Construction on site shall not commence until a landscape and waterway design plan for the Paparua Water Race is submitted and approved by the Christchurch City Council Waterways Ecologist. The planting plan shall:
  - Provide adequate screening of the development and provide ecological value to the waterway;
  - Be in accordance with the updated Christchurch City Council riparian planting guide provided in the Appendix below;





- Include a mix of small shrubs and taller trees to provide shading and range of habitat to the waterway;
- No plastic or other non-biodegradable material shall be used for any landscaping works within the setback; and
- Consist of native and locally sourced species, and not species that have high leaf fall.
  - In general, the requirements of this condition are not in keeping with the status of the water race as an artificial water course. There are competing priorities (e.g., roading, bird strike risk etc.) that are likely at odds with a conventional planting design for streams. Given the width of the water race, it is envisaged that a simple planting palette of native grasses (e.g., Carex spp.), or other low stature species, would provide added shading, food sources and habitat for instream biota. This will result in an improvement to water race values compared to present.
  - Overall, the current landscape design and planting that is proposed has been reviewed, and I consider this appropriate for improving waterway values. Prior approval by the CCC ecologist is unlikely to be necessary unless there are fundamental changes to the existing designs.
  - PDP agrees that the use of biodegradable products (e.g., weed mats) be used as much as possible for landscaping within the waterway setback.

## 6.0 Limitations

This report has been prepared by Pattle Delamore Partners Limited (PDP) on the basis of information provided by Carter Group Limited and others (not directly contracted by PDP for the work). PDP has not independently verified the provided information and has relied upon it being accurate and sufficient for use by PDP in preparing the report. PDP accepts no responsibility for errors or omissions in, or the currency or sufficiency of, the provided information.

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Yours faithfully

PATTLE DELAMORE PARTNERS LIMITED

Prepared by



Jarred Arthur

**Technical Director - Ecology** 

