

**BEFORE THE HEARINGS PANEL
FOR THE GORE DISTRICT COUNCIL PROPOSED DISTRICT PLAN**

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

AND

IN THE MATTER Hearing Stream 9 – Natural Features and
Landscape, Sites and Areas Significance
to Maori

**STATEMENT OF EVIDENCE OF GLENN ALISTER DAVIS
ON BEHALF OF STONEY CREEK STATION
ECOLOGIST
FEBRUARY 2024**

1 INTRODUCTION, QUALIFICATIONS AND RELEVANT EXPERIENCE

Qualifications and experience

- 1.1 I am a Director and Principal Environmental Scientist of e3Scientific Limited. I have been in this position since 2007. I have over 25 years' postgraduate work experience in environmental management and hold a BSc in Ecology and MSc in Geography.
- 1.2 I have worked as a professional ecologist in Otago and Southland since 2007. During this time, I have completed ecological investigations for a wide range of projects for the tourism, agricultural, forestry and land development sectors and a provided ecological support to regional and territorial authorities through plan change, technical review and compliance work.
- 1.3 Experience I have that is directly related to ecological provisions in the Gore District Plan is the work I completed on the Queenstown Lakes Proposed District Plan. For this process I provided ecological expertise in the identification of significant indigenous vegetation and habitat (which was completed over a 10-year period), reviewed ecological values associated with land proposed for rezoning supported the drafting of biodiversity provisions and presented evidence in hearings on all of these matters.
- 1.4 I have completed ecological assessments for vegetation clearing activities on many of the of high-country properties in the Upper Clutha, provided ecological advice in high country tenure review processes and supported LINZ in the review of pastoral lease applications for vegetation disturbance. This experience provides me with a sound understanding of the ecological values within our high-country environments and also the challenges associated with farming in these areas.

Involvement in the Project

- 1.5 I was engaged by Stoney Creek Station Limited to provide ecological advice to a working group established with the Gore District Council with the objective of developing a bespoke set of planning provisions that would support the farming operation while protecting the ecological values of the property. I provided expert ecological advice on behalf of Stoney Creek and worked constructively with council's ecologist Andrew Wells to draft ecological provisions that

would ensure the maintenance and enhancement of higher value areas while enabling Stoney Creek Station to undertake farming operations on lower value areas of the farm.

- 1.6 I completed an initial site visit with the working group in July 2024, reviewed the existing ecological information for the property, examined aerial photographic imagery and gathered further vegetation information through the completion of a site visit to assist with mapping the communities across Stoney Creek Station. My work was also supported by Carey Knox a professional herpetologist who assessed lizard values in some of the areas mapped as improved pasture.

Expert Witness Code of Conduct

- 1.7 I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and agree to comply with it while giving oral evidence before the Hearings Panel. This evidence is within my area of expertise, except where I state that I am relying upon the specified evidence of another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

2 SCOPE OF EVIDENCE

- 2.1 My scope of evidence includes:
- Section 3: Setting out the ecological context of Stoney Creek and the documented ecological attributes.
 - Section 4: Methodology undertaken to map the vegetation communities and the use of this plan in assigning planning provisions.
 - Section 5: Sets out the ecological values of Stoney Creek Station.
 - Section 6: Ecological effects of the proposed vegetation clearance provisions (ECO-R2) the Hokonui Hills Area.
 - Section 7: Comments on the s42a report.

3 ECOLOGICAL CONTEXT

- 3.1 Stoney Creek Station is situated in the north-east of the Hokonui Hills, adjacent to Croydon Bush and the township of Gore. The property has a long history of pastoral farming.

- 3.2 The Hokonui Hills were formed by the Southland Syncline that is a major geological structure extending in a northwest direction from the Catlins coast to the Hokonui Hills. The Southland Syncline rises up to approximately 600 metres above the valley floor and separates the Waimea Plains of Northern Southland from the Southland Plains.
- 3.3 The station covers an area of 2696 ha and ranges in elevation from approximately 100 metres above sea level adjacent the Waimea Highway to an unnamed peak at 666 metres asl.
- 3.4 The station lies within two ecological districts. The gently sloping north facing slopes at or about the 300-metre contour and below lies within the Gore Ecological District with the steeper slopes at higher elevations lying in the Hokonui Hills Ecological District.
- 3.5 The pre-human vegetation on the lower slopes within the Gore Ecological District was most likely dominated by red tussock grassland with localised podocarp and podocarp-hardwood forest however like most of the Gore ED the gentle lower slopes of Stoney Creek have been intensively developed and most of the indigenous vegetation cover has been removed (McEwan, 1987). This is supported by the threatened environment classification (TEC) which maps most the Gore ED as land with less than 10% of its original vegetation cover remaining.
- 3.6 The pre-human vegetation on the steeper slopes and higher elevation country in the Hokonui Hills ED was forested in podocarp and podocarp-hardwood forests. Remnants of these communities are present in Croydon Bush and Dolamore Park however most of the forest has been replaced by extensive areas of red tussock grassland, short tussock grassland, mixed scrub, manuka and exotic pasture (McEwan, 1987). The threatened environment classification maps the hill country of Stony Creek Station as being within a land environment with greater than 30% indigenous vegetation over remaining but with less than 10% under formal protection. This is in contrast to much of the Gore District where the indigenous vegetation cover remaining is less than 10%.
- 3.7 Stoney Creek has significant geographic, biodiversity and pastoral farming features that are very different to the more intensively developed low lying areas that cover much of the Gore district. It is for these reasons that I consider a bespoke set of planning rules is appropriate for the Hokonui Hills.

4 METHODOLOGY FOR MAPPING THE VEGETATION OF STONEY CREEK STATION

- 4.1 In order to assist the working group with considerations on the planning provisions for Stoney Creek we completed a vegetation mapping exercise so the group could understand the distribution of vegetation across the station.
- 4.2 The mapping involved the review of Google Earth satellite imagery and importing the imagery into our GIS software for mapping purposes. An initial mapping exercise was undertaken from detailed analysis of the aerial imagery and this work was subsequently ground truthed with two site visits to survey the vegetation communities and improve the resolution of the initial mapping.
- 4.3 Attachment 1 is the vegetation plan developed through the mapping process. This information was provided to the working group to assist the development of the planning provisions for the Hokonui Hills area. I note the mapping aligns closely with the Significant Indigenous Vegetation Area (SIVA) and Indigenous Vegetation Area (IVA) Polygons presented in Appendix G of the s42a report.

5 ECOLOGICAL VALUES

Vegetation and Flora

- 5.1 The ecological values of Stoney Creek Station are set out in the following paragraphs. The information provided is based on both desktop assessment and site visits completed by myself and two e3scientific ecologists Liam Salemink-Waldren and Trudy Anderson. Stoney Creek also engaged herpetologist Carey Knox to examine the lizard values of the property through desktop research and a site visit.
- 5.2 The ecological desktop and fieldwork completed by e3scientific ecologists mapped a total of six indigenous vegetation communities across the property with 87 indigenous species recorded. A plan of the vegetation communities is provided as Attachment 1 and described in the following paragraphs.
- 5.3 Broadleaf forest is generally restricted to the southeast of the station and is predominantly confined to large gulley systems with actively regenerating areas expanding within the manuka shrubland. This community covers approximately 150 hectares of Stoney Creek Station. The forest canopy is dominated by

kōhūhū/black matipo (*Pittosporum tenuifolium*), tarata/lemonwood (*Pittosporum eugenioides*) kōwhai (*Sophora microphylla*) and broadleaf/kāpuka (*Griselinia littoralis*). The subcanopy and groundcover stratum consists of a diverse range of ferns, herbs, shrubs, and lianes. A total 31 indigenous species were recorded within the broadleaf forest community.

- 5.4 Manuka shrubland is largely confined to the southeast of the station. Additional coverage occurs within adjacent hillslopes, particularly areas that were historically cleared but no longer actively grazed. This community covers an area of approximately 206 ha on Stoney Creek Station. The canopy is predominantly a monoculture stand of manuka. In older stands the subcanopy is dominated by broadleaf species that will overtop the manuka in time resulting in a broadleaf forest. A total of 32 indigenous species were recorded within the manuka shrubland vegetation community.
- 5.5 The wharariki/inaka/olearia shrubland is predominantly restricted to south facing locations of less free draining, clay soils. The shrubland is dominated by inaka (*Dracophyllum longifolium*), wharariki (*Phormium cookianum* subsp. *cookianum*), mountain tauhinu (*Ozothamnus vauvilliersii*), koromiko (*Veronica salicifolia*) and a range of *Olearia* species with an understorey of small herbs and ferns. This community covers an area of approximately 105 ha. Along some rocky ridges extending into north facing areas the dominant vegetation remained similar but includes greater assemblages of ferns, drought tolerant shrubs and lianes. A total of 33 indigenous species were recorded within the wharariki/inaka/olearia vegetation community.
- 5.6 The coprosma/corokia scrub is found on drier sites on steeper terrain predominantly on north facing slopes. The community covers an area of approximately 110 ha and is dominated by *Corokia cotoneaster*, as well as various small-leaved coprosmas, *Myrsine divaricata*, and *Discaria toumatou*. Gaps in scrub cover were dominated by short tussock grassland with broadleaf forest species regenerating within areas adjoining forest fringes. A total of 18 indigenous species were recorded within the vegetation community.
- 5.7 The tall tussock grassland is characteristic of the wet gullies and exposed faces and ridges dispersed throughout the central and northern part of the station. The community covers an area of approximately 75 ha and becomes more prevalent above

approximately 500 m asl. *Chionochloa rigida* subsp. *rigida* and snow tussock hybrids (*Chionochloa rigida* x *Chionochloa rubra* subsp. *cuprea*) dominate the vegetation cover with grey shrubland, short tussock species and low growing herbs interspersed through the grassland.

- 5.8 The remaining landcover of Stoney Creek consists of high producing exotic grassland and improved pasture. Improved pasture ranges from vegetation entirely dominated by exotic pasture species through to areas that contain tall tussock and scattered shrubland species. All of this area has been topdressed and oversown and is actively farmed and meets the definition of Improved Pasture in the National Policy Statement for indigenous Biodiversity (NPS-IB).
- 5.9 The property has a range of woody weeds including hawthorn (*Crataegus monogyna*), radiata pine/Monterey pine (*Pinus radiata*), willow (*Salix* sp(p.)), Cypress (*Cupressus* sp.) and black poplar (*Populus nigra*). Gorse is the most notable pastoral weed on Stoney Creek and has infested areas to the south of the property.
- 5.10 Of the species noted within the above vegetation communities the tree daisies *Olearia lineata*, *Olearia fragrantissima*, and manuka are classified under the New Zealand Threat Classification System (NZTCS) (de Lange et al., 2017) as At Risk – Declining. All other species present are classified as Not Threatened. We note manuka is widespread in the Southland region and is only listed as 'at risk-declining' due to the risk of myrtle rust which has not been detected in Otago or Southland.

Fauna

- 5.11 The communities described in the previous paragraphs provide habitat for a range of birds, lizards and invertebrates.
- 5.12 Attachment 2 provides a list of bird species that were observed during our site visits. The attachment also provides a list of birds that are associated with the habitats present on Stoney Creek and provides information on the likelihood of each species being present. Most of the species observed are not common however two species Mātātā/South Island fernbird and Pīhoihoi/New Zealand Pipit are listed as 'at risk-declining'. The fernbird was observed in wharariki/dracophyllum/olearia scrubland and NZ pipit were observed in the tussock grassland and grey shrubland.

- 5.13 Attachment 3 provides a list of lizard species that have been recorded at Stoney Creek Station or are likely to be present. Green skink is listed as 'Threatened – Nationally Critical' and there is a record of this presence of this species from 2001. This species is found in damp areas, usually with rock cover and dense native vegetation. A further 2 lizard species listed as 'at risk-declining' have been recorded on Stoney Creek including Korero gecko (*Woodworthia* "Otago/Southland large") and Southern grass skink (*Oligosoma* aff. *polychroma*; Clade 5) with the common not threatened McCanns skink (*Oligosoma maccanni*) also present.
- 5.14 On the 21 January 2025 Carey Knox an experienced herpetologist completed a survey of an area of improved pasture that contains approximately 50% cover of tall tussock grassland. The location of the survey is provided in Attachment 4. The survey was undertaken to determine if this community was likely to contain at risk or threatened lizard species. Mr Knox found these areas had no or minimal chance of green skink, korero gecko or cryptic skink. Mr Knox found one McCanns skink during his visit on a rock outcrop outside of the area of interest and no Southern grass skink. The information provided by Mr Knox assisted my consideration of the risks associated with the farming operation to lizard species and I find that the risk to lizards from farming activities is low given the limited habitat value the improved pasture provides lizard species.

Summary of Ecological Values

- 5.15 In summary, approximately 25% of Stoney Creek Station contains indigenous vegetation communities that contain moderate to high ecological values that are representative of the Hokonui Hills ecological district. While they are all seral in nature, successional processes are well advanced in some areas, particularly in the broadleaf forest and some of the manuka shrublands and these are on a trajectory toward forests similar in nature to Croydon Bush. Other areas of shrubland are more induced communities but they provide habitat for at risk species such as the tree daisys (*Olearia lineata* and *Olearia fragrantissima*), fernbird and NZ pipit and a number of lizard species. It is my view that these are the areas of the property require protections from the plan to ensure the ecological values of Stoney Creek Station are maintained and enhanced.
- 5.16 Based on the ecological values known for Stoney Creek Station, the working group categorised the ecological values into low, medium and high values. This work was completed to support

the development of the rules set out in the s42a report. This work was adopted by the working group and incorporated into the Hokonui Hills Vegetation Plan shown in Appendix 7 of the ECO Chapter. For Stoney Creek Station Area A represents areas of medium ecological value with Area C representing areas of high ecological value.

- 5.17 High value areas include the broadleaf forest and older manuka shrubland that is in an advanced successional state where broadleaf species dominate the subcanopy of the manuka stands. The high value areas are representative of biodiversity of the Hokonui Ecological District, has a diverse flora and is contiguous with Croydon Bush and is on an ecological trajectory toward a podocarp forest similar to Croydon Bush. Broadleaf forest is also recognised in the Southland Regional Policy Statement as an 'at-risk' forest type. The high value areas cover approximately 366 ha of Stoney Creek Station. These areas align well with SIVA shown on Appendix G of the s42a report.
- 5.18 Medium value areas include the Wharariki/Dracophyllum/Olearia Scrub, Coprosma/Corokia shrubland and tall tussock grassland/grey shrubland communities that have a complete canopy cover and have not been opened up by pastoral activity. This vegetation is more fragmented than the high value areas described in paragraph 4.17 but are representative of biodiversity of the Hokonui Hills ecological district and support a number of at risk species. The medium value areas cover approximately 270 ha of Stoney Creek Station.
- 5.19 Low value areas are dominated by highly developed high producing exotic grassland and areas that contain tall tussock and scattered shrubland that has an open canopy and an understorey dominated by exotic pasture grasses. These areas are all actively grazed and are an important part of the Stoney Creek farming operation. They also have low habitat value for birds, lizards and invertebrates.
- 5.20 I note that 'improved pasture' is a reference to the section 3.17 of the National Policy Statement for Indigenous Biodiversity (NPS-IB). This section provides for the maintenance of improved pasture where it may affect a Significant Natural Area (SNA). While the scattered shrubland and open tussock grassland would not meet the SNA criteria it is logical that this provision should also cover improved pasture where the ecological values are not at a level that would meet the SNA criteria.

6.0 PROVISIONS OF THE ECOSYSTEMS AND INDIGENOUS BIODIVERSITY CHAPTER OF THE PROPOSED DISTRICT PLAN (PART ECO-R2)

- 6.1 ECO-R2 sets out indigenous vegetation and land disturbance provisions for the Hokonui Hills Area. I was involved in the development of the provisions with the Stoney Creek working group and they have been developed with the intent of maintaining and enhancing the ecological values of the Station while enabling typical farming activities to continue such as construction and maintenance of tracks and fences and ongoing maintenance of pastures.
- 6.2 A range of permitted clearing and disturbance activities are set out in ECO-R2 1. a-k. I consider the activities set out as permitted will not affect the ecological values of the property and the biodiversity of the station will be maintained through these provisions. With respect to these provisions I provide the following commentary focussing on a. the maintenance of improved pasture and j. and k. provisions associated with clearance within Areas A and C as shown in Figure 7 of the ECO chapter.
- 6.3 Provision 1. a. provides for the maintenance of improved pasture within the area of the station mapped in Appendix 7. As discussed in section 4.19 'Areas of Improved Pasture and Exotic Vegetation' are dominated by high producing exotic grassland. To a lesser extent this area also includes improved pasture that contains indigenous shrubs and tall tussock that has an open canopy and a ground cover consisting of exotic pasture grasses. As discussed in section 4.20 I consider these areas are improved pasture as described in section 3.17 of the NPS-IB. While this provision is specific to disturbance where it may affect SNAs, it is logical that this provision should also cover improved pasture where the ecological values are not at a level that would meet the SNA criteria.
- 6.4 To further assist my understanding of the ecological value of improved pasture areas that contain an indigenous component Stoney Creek Station engaged Carey Knox to complete a lizard survey of these areas. Mr Knox concluded that the areas mapped as improved pasture with a tall tussock grassland component was low value habitat for lizards. I therefore find that indigenous vegetation clearance should be permitted in all areas mapped as improved pasture and exotic vegetation. This vegetation has low ecological value and farming activities within these areas do not require planning controls to support biodiversity.

- 6.5 Provision 1. j. enables clearance of less than 3750 m² per 5 years in the Area A, as shown on Appendix 7. The total area of Area A on Stoney Creek Station is 270 ha. Given the prevalence of indigenous vegetation within Area A I consider it is highly unlikely the permitted levels of clearance would affect the biodiversity. Furthermore, the provisions only enable construction of new fences, tracks or other activities essential for existing farming operations. I consider these activities will have a low level of disturbance that is similar in nature to historical disturbances that have occurred on the property. With this in mind I consider the provisions will ensure the maintenance of indigenous biodiversity in Area A.
- 6.6 Provision 1. k. enables clearance of less than 1250 m² per 5 years in Area C, as shown on Appendix 7. The total area of Area C on Stoney Creek Station is 366 ha. Given the prevalence of indigenous vegetation within Area C the permitted provision will not result in the loss of indigenous biodiversity associated with this provision. On the contrary, it is my opinion that this provision will support a significant improvement in biodiversity as this area continues to regenerate.
- 6.7 In summary, it is my view that the provisions set out in ECO-R2 provide the certainty of operation for Stoney Creek Station while maintaining and promoting the enhancement of biodiversity across the property.

7.0 COMMENTS ON THE S42A REPORT

- 7.1 I have reviewed the s42a report prepared by Mr Matt Heale and I consider the elements associated with the Hokonui Hills Area align well with the findings of the Stoney Creek Station working group. I do however note Mr Heales comment in paragraph 616 of the s42a report where he states he is open to an alternative approach that would rely on the Council Authorised Biodiversity Management Plan (CABMP) standard ECO-R1(1)(f) instead of the proposed ECO-R2.
- 7.2 As I have set out in section 3 of my evidence the Hokonui Hills area has a very different suite of geographical, ecological and pastoral farming characteristics to most of the Gore District. In my view this provides a sound rationale for considering a specific suite of indigenous vegetation clearance and land disturbance provisions to the rest of the district. I am of the view that the working group has crafted a suite of provisions that will support the maintenance and improvement of indigenous biodiversity.

- 7.3 Mr Heales suggestion that the Hokonui Hills Area could be incorporated into a CABMP lacks clarity and even suggests there may be some merit in requiring a consent pathway for CABMPs. Without some certainty associated with this approach, I am of the view that the ECO-R2 provisions are an appropriate method for managing biodiversity in the Hokonui Hills area.

Glenn Davis

7 February 2025

Attachments

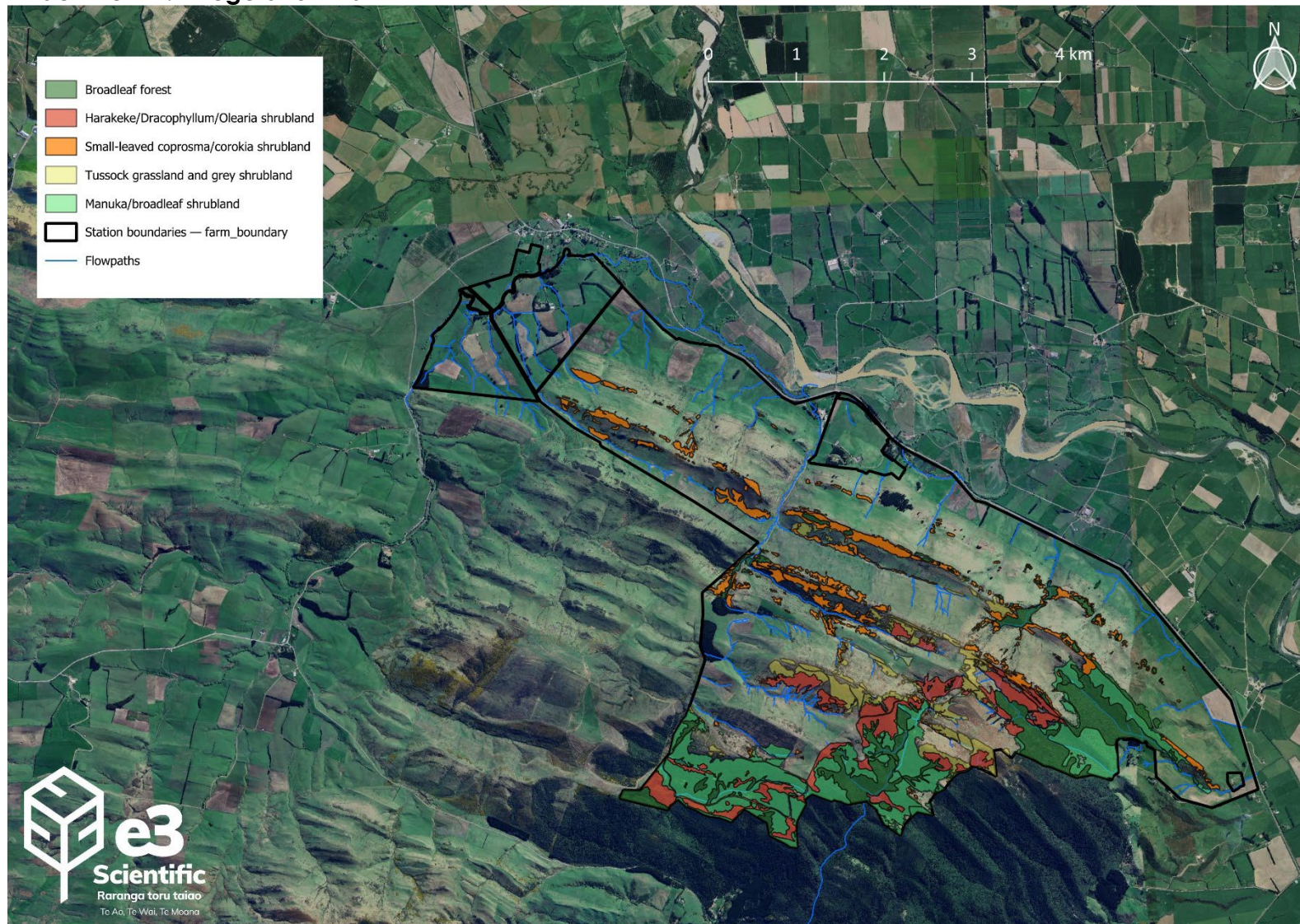
Attachment 1: Vegetation Plan of Stoney Creek Station.

Attachment 2: Bird species observed and possibly present on Stoney Creek Station.

Attachment 3: Lizard species recorded or possibly present on Stoney Creek Station.

Attachment 4: Area of lizard survey undertaken by Carey Knox in January 2025.

Attachment 1: Vegetation Plan



Attachment 2: Bird Species Observed and Possibly present on Stoney Creek Station

Species	Preferred Habitat	Likelihood of Occurrence	Threat Classification (Robertson et al., 2021)	Ecological Value
Piwakawaka/South Island fantail (<i>Rhipidura fuliginosa fuliginosa</i>)	Broadleaf forest, mānuka shrubland, wharariki/dracophyllum/olearia scrub, and small-leaved coprosma/corokia shrubland.	Observed	Low	Low
Riroriro/Grey warbler (<i>Gerygone igata</i>)	Broadleaf forest, mānuka shrubland, wharariki/dracophyllum/olearia scrub, small-leaved coprosma/corokia shrubland, tussock grassland and grey shrubland, and scattered tussock/grey shrubland.	Observed	Low	Low
Korimako/Bellbird (<i>Anthornis melanura melanura</i>)	Broadleaf forest, mānuka shrubland, wharariki/dracophyllum/olearia scrub, and small-leaved coprosma/corokia shrubland.	Observed	Low	Low
Tūi (<i>Prosthemadera novaeseelandiae novaeseelandiae</i>)	Broadleaf forest and mānuka shrubland.	Moderate	Low	Low
Kererū/New Zealand wood pigeon (<i>Hemiphaga novaeseelandiae</i>)	Broadleaf forest and mānuka shrubland.	Observed	Low	Low
Pūtangitangi/Paradise shelduck (<i>Tadorna variegata</i>)	Open exotic vegetation (grassland) and around ponds/water storage areas	Moderate	Low	Low
Kāhu/Australasian harrier (<i>Circus approximans</i>)	Open exotic vegetation (grassland), tussock grassland and grey shrubland, and scattered tussock/grey shrubland.	Observed	Low	Low

Kārearea/Eastern falcon (<i>Falco novaeseelandiae novaeseelandiae</i>)	Mature trees (native and exotic) and slash surrounded by open grassland as well as broadleaf forest.	Low	At Risk - Recovering	Moderate
Pūkeko (<i>Porphyrio melanotus melanotus</i>)	Open exotic vegetation (grassland) and around ponds/water storage areas, wet areas of tussock grassland and grey shrubland, and scattered tussock/grey shrubland.	Low	Low	Low
Kākā/South Island kaka (<i>Nestor meridionalis meridionalis</i>)	Broadleaf forest	Low	Threatened – Nationally Vulnerable	Very High
Kākāriki/Yellow crowned parakeet (<i>Cyanoramphus auriceps</i>)	Broadleaf forest and mānuka shrubland.	Low	At Risk – Declining	High
Pipīwharau/roa/Shining cuckoo (<i>Chrysococcyx lucidus lucidus</i>)	Broadleaf forest and mānuka shrubland.	High	Low	Low
Koekoā/Long-tailed cuckoo (<i>Eudynamys taitensis</i>)	Broadleaf forest and mānuka shrubland.	Low	Threatened – Nationally Vulnerable	Very High
Ruru/Morepork (<i>Ninox novaeseelandiae novaeseelandiae</i>)	Broadleaf forest and mānuka shrubland.	High	Low	Low
Pipipi/Brown creeper (<i>Mohoua novaeseelandiae</i>)	Broadleaf forest, mānuka shrubland, wharariki/dracophyllum/olearia scrub, small-leaved coprosma/corokia shrubland, and tussock grassland and grey shrubland.	High	Low	Low

Ngirungiru/South Island tomtit (<i>Petroica macrocephala macrocephala</i>)	Broadleaf forest and mānuka shrubland.	High	Low	Low
Mātātā/South Island fernbird (<i>Bowdleria punctata punctata</i>)	Wet areas within wharariki/dracophyllum/olearia scrubland and tussock grassland and grey shrubland.	Observed	At Risk – Declining	High
Tauhou/Silvereye (<i>Zosterops lateralis lateralis</i>)	Broadleaf forest, mānuka shrubland, and small-leaved coprosma/corokia shrubland	High	Low	Low
Pīhoihoi/New Zealand Pipit (<i>Anthus novaeseelandiae novaeseelandiae</i>)	Tussock grassland and grey shrubland.	Observed	At Risk – Declining	High

Attachment 3: Lizard Species recorded or possibly present on Stony Creek Station

Common Name	Conservation Status	Likelihood of Occurrence	Ecological Value	Notes
Green skink (<i>Oligosoma chloronoton</i>)	Threatened – Nationally Critical	Known to occur OR highly likely to occur	Very High	Damp areas, usually with dense native vegetation, such as snow tussock, and rock cover. There are reports from several different areas on Stony Creek Station, indicating that the species was once widespread in the area and is likely to still be present.
Cryptic skink or possibly herbfield skink (<i>Oligosoma inconspicuum</i>)	At Risk - Declining (herbfield skink has the same status).	Moderate	High	Damp areas, usually with dense native vegetation, such as snow tussock, and rock cover. Present in high abundance on the Bare Hill Conservation Area about 20 km to the west.
Korero gecko (<i>Woodworthia</i> “Otago/Southland large”)	At Risk - Declining	Known to occur	High	Rocky areas or forest/shrubland with sufficient retreats. Only occurs in parts of Otago and Southland.
Southern grass skink (<i>Oligosoma</i> aff. <i>polychroma</i> ; Clade 5)	At Risk - Declining	Known to occur	High	Widespread from Banks Peninsula southwards but sometimes restricted to damp areas in dry landscapes. Occupies damp areas, shrublands, tussockland, wetlands, and rank grass.
McCann’s skink (<i>Oligosoma maccanni</i>)	Not Threatened	Known to occur	High	Widespread in suitable habitats in inland Otago, Southland, and Canterbury to about 1,600 m ASL. Occupies a range of habitats including dry, rocky areas.

Attachment 4: Area surveyed by herpetologist Carey Knox

