

**BEFORE THE HEARINGS PANEL  
FOR THE PROPOSED QUEENSTOWN LAKES DISTRICT PLAN**

**IN THE MATTER** of the Resource  
Management Act 1991

**AND**

**IN THE MATTER** of Resort Zone Hearing  
Stream 9 – Millbrook  
Zone

---

**STATEMENT OF EVIDENCE OF HANNAH MARY AYRES ON BEHALF OF  
QUEENSTOWN LAKES DISTRICT COUNCIL**

**LANDSCAPE – MILLBROOK ZONE**

**17 January 2017**

---

 **Simpson Grierson**  
Barristers & Solicitors

S J Scott  
Telephone: +64-3-968 4018  
Facsimile: +64-3-379 5023  
Email: sarah.scott@simpsongrierson.com  
PO Box 874  
SOLICITORS  
CHRISTCHURCH 8140

## TABLE OF CONTENTS

1. INTRODUCTION.....	1
2. EXECUTIVE SUMMARY .....	3
3. BACKGROUND .....	4
4. TERMINOLOGY.....	5
5. THE WHAREHUANUI LANDSCAPE STUDY AND THE READ LANDSCAPE ASSESSMENT.....	6
6. THE NOTIFIED MILLBROOK STRUCTURE PLAN.....	9
7. BDG LANDSCAPE ASSESSMENT REPORT – APRIL 2015 .....	14
8. SUMMARY OF SUBMISSIONS ON THE NOTIFIED STRUCTURE PLAN (WITH REGARD TO LANDSCAPE MATTERS) .....	23
9. ANNE STEVEN EXPERT OPINION (OCTOBER 2015) – SUBMITTED BY X-RAY TRUST [356] .....	26
10. MILLBROOK (696) – RESPONSE TO SUBMISSIONS .....	30
11. RESPONSE TO SUBMISSION TOPICS (RELATED TO LANDSCAPE) .....	33
12. CONCLUSION .....	39

Appendix 1 – Wharehuanui Landscape Study By Baxter Design Group dated January 2015

Appendix 2 – The Baxter Design Group Landscape Assessment Report And Accompanying Graphic Attachment, BDG dated February 2015

Appendix 3 – Expert Opinion And Accompanying Graphic Attachment (Anne Steven Landscape Architect) - Submitted By X-Ray Trust [356] dated October 2015

Appendix 4 – The Baxter Design Group Landscape Assessment Addendum And Accompanying Graphic Attachment, BDG dated December 2016

Appendix 5 – Current Millbrook Design Guidelines

Appendix 6 – Diagram Showing Indicative Location Of Suggested Roadside Planting (Rp) Overlay On The Millbrook Structure Plan

Appendix 7 – Marion Read Landscape Assessment And Graphic Attachment dated June 2014

Appendix 8 – Queenstown Lakes District Plan Review High Level Review Of Proposed District Plan Provisions dated 20 November 2014

## 1. INTRODUCTION

- 1.1 My full name is Hannah Mary Ayres. I hold the position of Director and Registered Landscape Architect at Rough & Milne Central Otago Ltd. I have been in this position since July 2015.
- 1.2 I hold Bachelor and Master of Landscape Architecture Degrees from Lincoln University. I have six years' experience in practice as a Landscape Architect, working at Rough & Milne Christchurch prior to establishing the Rough & Milne Central Otago practice. I am also a Registered member of the New Zealand Institute of Landscape Architects.
- 1.3 I have been engaged by the Queenstown Lakes District Council (**QLDC**) to provide evidence in relation to landscape matters for the Resort Zone Hearing Stream 9 – Millbrook Zone, Chapter 43 of the Proposed District Plan (**PDP**).
- 1.4 Although this is a Council hearing, I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I confirm that I have considered all the material facts, that I am aware of what might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.
- 1.5 In the course of preparing this evidence I have visited the Millbrook site and have familiarised myself with the documentation prepared to date in relation to the Millbrook Zone. In particular:
- (a) the operative Special Zones (Resort Zones, which includes Millbrook) in Section 12 of the Operative District Plan (**ODP**);
  - (b) the operative Millbrook Structure Plan (at pages 24 and 25 of Section 12 of the ODP) (**operative Millbrook Structure Plan**) and ODP Zone Boundary;
  - (c) the 'Wakatipu Basin Residential Subdivision and Development: Landscape Character Assessment', Marion

Read, June 2014 (**Read Landscape Assessment**) (**Appendix 7**);

- (d) the Wharehuanui Landscape Study, Baxter Design Group (**BDG**), January 2015 (**Appendix 1**);<sup>1</sup>
- (e) the Landscape Assessment Report and accompanying graphic attachment, BDG, dated February 2015 (**BDG Landscape Assessment Report**) (**Appendix 2**);
- (f) the notified Millbrook Structure Plan (**notified Structure Plan**) and PDP Zone Boundary;
- (g) the notified Millbrook Resort Zone Chapter 43 of the PDP (**notified Millbrook Chapter**);
- (h) relevant submissions and further submissions (and supporting documents, including Expert Opinion Report by Anne Steven, dated October 2015 (**Anne Steven Expert Opinion**) (**Appendix 3**) on Chapter 43; and
- (i) Queenstown Lakes District Plan Review High Level Review of Proposed District Plan provisions dated 20 November 2014 (Ben Espie's peer review of the Read Landscape Assessment) (**Appendix 8**).

**1.6** I have also considered revised documentation provided to the Council by the Millbrook Country Club Ltd (**MCCL**) on 2 December 2016, which includes a:

- (a) revised Millbrook Structure Plan (**MCCL revised Structure Plan**);
- (b) revised Millbrook Resort Zone Chapter (**MCCL revised Millbrook Chapter**); and
- (c) Landscape Assessment Addendum and revised Graphic attachment prepared by BDG (**BDG Landscape Assessment Addendum**) (**Appendix 4**), in response to submissions made to the Millbrook Resort Zone of the PDP.

**1.7** I also attach the current Millbrook Design Guidelines, as **Appendix 5**.

<sup>1</sup> <http://www.qldc.govt.nz/assets/Uploads/Council-Documents/2015-Full-Council-Agendas/30-April-2015/Item-11-Attachments/c1-Wharehuanui-Landscape-Study.pdf>

1.8 The documentation provided by MCCL is Appendix 5 to the s42A report.

1.9 In this evidence:

- (a) if I refer to a provision number without any qualification, it is to the notified provision number and has not changed through Ms Ruth Evan's (s42A author for the Millbrook Zone) recommendations;
- (b) if I refer to a 'redraft' provision number, I am referring to the s42A recommended provision number; and
- (c) if I refer to a 'MCCL' provision number, I am referring to the provision number as used in the MCCL revised Millbrook Chapter (which as noted above, is included in Appendix 5 to the s42A report).

## 2. EXECUTIVE SUMMARY

2.1 The key findings from my evidence are:

- (a) I agree with the Read Landscape Assessment and the BDG Landscape Assessment Report in that although the Dalgleish Farm land currently depicts a moderately high level of visual amenity and rural character, the site has a **moderate** ability to absorb appropriate development in strategic and specific locations;
- (b) with the development proposed in the MCCL revised Millbrook Structure Plan, the landscape character of the Dalgleish Farm will change from a relatively unmodified pastoral landscape to a modified landscape that is recognised as part of Millbrook Resort. Even so, landscape and visual amenity values associated with retention of open space, presence of amenity tree and shrub plantings, and recognition and protection of landform and features of the site, should remain a priority;

- (c) the retention and/or long term replacement of those trees that perform a screening function along Malaghans Road should be identified on the Structure Plan<sup>2</sup> and incorporated into the rules. In addition, there should be more consideration given to visual effects of the proposed development on the upper slopes from a more comprehensive selection of view shafts along Malaghans Road;
- (d) the amended Millbrook Design Guidelines will play a critical role in ensuring buildings and associated landscaping on the upper slopes of Dalgleish Farm are only marginally visible from Malaghans Road and elevated distant viewpoints. It is critical that the amended guidelines are submitted with the Council (and approved) as soon as possible and before any development goes ahead in that part of the zone; and
- (e) I have also made a number of suggestions with regard to the management of Landscape Protection (LP) Activity Areas and the activity status of farm buildings to ensure landscape amenity values are protected.

### **3. BACKGROUND**

**3.1** This evidence considers the notified Millbrook Chapter from a landscape perspective. The notified Millbrook Chapter seeks to amend and extend the boundaries of the ODP Millbrook Resort Zone and Millbrook Structure Plan, to include the Dalgleish Farm.

**3.2** This evidence is an independent peer review of the various plans, maps, assessments, submissions and rules relating to landscape issues to the notified Millbrook Resort Zone.

**3.3** I have reviewed and considered the following matters in my evidence:

<sup>2</sup> The Revised Chapter appended to the s42A report at Appendix 1 recommends to replace the notified Structure Plan with the Structure Plan provided by MCCL on 2 December 2016. However, MCCL's revised Structure Plan does not include this new overlay and will therefore be updated in the Council's reply.

- (a) the various landscape studies and assessments that relate to the Millbrook Zone;
- (b) the notified Structure Plan and notified objectives, policies, rules and assessment matters set out in the notified Millbrook Chapter; and
- (c) the submissions and further submissions made on the notified Millbrook Chapter and whether or not, in my opinion, they are appropriately addressed by the MCCL revised Structure Plan and MCCL revised Millbrook Chapter.

#### 4. TERMINOLOGY

4.1 I have set out below the terminology I use in this evidence to define the magnitude degree of effects on visual amenity. When I use the word "proposal", I am referring to the permitted works or activity under the respective zone provisions being discussed:

##### Magnitude / Degrees of Effects on Visual Amenity

- |                     |  |
|---------------------|--|
| <b>None:</b>        | No part of the proposal, or work or activity associated with it, is discernible.   |
| <b>Negligible:</b>  | Only a very small part of the proposal is discernible and / or it is at such a distance that it is scarcely appreciated. Consequently it has very little effect on the scene.  |
| <b>Low/Slight:</b>  | The proposal constitutes only a minor component of the wider view, which might be missed by the casual observer or receptor. Awareness of the proposal would not have a marked effect on the overall quality of the scene. |
| <b>Moderate:</b>    | The proposal may form a visible and recognisable new element within the overall scene and may be readily noticed by the observer.  |
| <b>Substantial:</b> | The proposal forms a significant and immediately apparent part of the scene that affects and changes its overall character.  |
| <b>Severe:</b>      | The proposal becomes the dominant feature of the scene to which other elements become subordinate  |

and it significantly affects and changes its character.

4.2 I note that impacts need not necessarily be detrimental. For example, the removal of a group of trees or a plantation might have a 'substantial' impact, but the effect on the landscape and views may be beneficial.

## **5. THE WHAREHUANUI LANDSCAPE STUDY AND THE READ LANDSCAPE ASSESSMENT**

5.1 In this section I provide an independent review of two broad scale landscape studies of the Wakatipu Basin that were carried out to determine the Basin's ability to absorb further development or change. For the purposes of this evidence I focus on the two studies as they evaluate the appropriateness of development within the Dalgleish Farm, being the extent of the Millbrook zone extension.

5.2 Both studies are based on a much broader study area than just the Dalgleish Farm and are as a result, not specific in their discussion on the Dalgleish Farm. Nevertheless, the broad scale studies usefully assist in providing context and perspective that are crucial to identifying and evaluating the ability of a landscape area (compared to other landscape areas) to absorb a level of development.

5.3 BDG's Wharehuanui Landscape Study was commissioned by MCCL to better understand the specific and general values associated with the landscape that surrounds the Millbrook Resort and inform design options for Dalgleish Farm. The Landscape Study has also been used to form the basis of the landscape assessment by BDG that assesses the landscape and visual effects of the notified Structure Plan. It was submitted as one of the documents that were prepared for the notified Millbrook Chapter.

5.4 Preceding the Wharehuanui Landscape Study, a similar study was carried out by Ms Marion Read of Read Landscapes to assess the landscape character of the Wakatipu Basin against its ability to absorb further change; the Read Landscape Assessment. This study

was commissioned by QLDC as part of the District Plan review process. It was peer reviewed by Mr Ben Espie from Vivian Espie Ltd, and referred to by BDG in the Wharehuanui Landscape Study.

**5.5** Although the methodologies used to assess the landscape's character differed between each study, I am comfortable that each methodology is valid. Differing methodologies is to be expected due to the differing scale of the study area of each report. The Read Landscape Assessment methodology, which takes direction from the British landscape Institute: Guidelines for Landscape and Visual Impact Assessment (**GLVIA**), represents a best practice methodology that is widely accepted and used by the landscape planning profession. BDG uses assessment guidelines set out by the RMA Quality Planning Resource (administered by the New Zealand Planning Institute) for 'Area Based' landscape studies and is also considered best practice methodology in New Zealand. Both methods of landscape character assessment acknowledge that landscape characterisation should not only be based on visual characteristics, but also by the ecological and emotional values of a place.

**5.6** While there are differences in the scale of the study area and the methodology for identifying landscape units, both landscape studies consistently evaluate the Dalgleish Farm site as having a **moderate** ability to absorb appropriate development in strategic and specific locations. The following conclusions were made:

- (a) In the Read Landscape Assessment, which is the broader of the two landscape studies, the Dalgleish Farm is predominantly included within the Malaghans Ridge Landscape Unit with the small slither of land next to Malaghans Road being included in the Millbrook / The Hills Landscape Unit. The Assessment describes the Malaghans Ridge Landscape Unit as an intermediate zone, where landscape character and visual amenity are **moderately**

**vulnerable** to the effects of further development.<sup>3</sup> Within the areas identified as being an intermediate zone:<sup>4</sup>

*...the relatively complex topography is central to their localised landscape character and its vulnerability to change is limited. The lack of visibility from public and private locations limits the potential effects of further development on the visual amenity of the Basin as a whole.*

- (b) In his peer review of the Read Landscape Assessment, Mr Espie does not disagree with Ms Read on this aspect.
- (c) In the Wharehuanui Landscape Study (which focuses on the landscape at a finer scale than the Read Landscape Assessment) the Dalgleish Farm site spans over the Upper Hills Landscape Unit of the wider Wharehuanui Hills landscape and the Millers Flat Landscape Unit of the wider Mill Creek Catchment. These landscape units are identified by BDG as having a **moderate** ability to absorb further appropriate development, especially within the lower hills and plateaus (of the *Upper Hills landscape unit*),<sup>5</sup> and **moderate** ability to absorb further development at the base of the north facing escarpment (in the *Millers Flat landscape unit*).<sup>6</sup>

**5.7** I concur with both of these evaluations. I agree that although the landscape area depicts a moderately high level of visual amenity and rural character, the Dalgleish Farm site has a **moderate** ability to absorb appropriate development in strategic and specific locations. The complex topography allows for development to be absorbed because it can be relatively well hidden by the existing landforms.

3 Read Landscape Assessment, at page 13.  
4 Read Landscape Assessment, at page 13.  
5 Wharehuanui Landscape Study, at page 34.  
6 Wharehuanui Landscape Study, at page 29.

**5.8** I am comfortable that with a consistent opinion from three Landscape Architects, coupled with my own knowledge of the study area, that the findings of both studies (with regard to the Dalgleish Farm site) are robust and defensible.

## **6. THE NOTIFIED MILLBROOK STRUCTURE PLAN**

**6.1** The operative Millbrook Structure Plan is included in the Special Zone (Resort Zone) Section (12) of the ODP, which guides the development of Millbrook Resort. The notified Structure Plan is an amended and extended version of the operative Structure Plan. I understand it was provided by MCCL in the preparation of the notified Millbrook chapter. Following the submission period (during which public feedback was received on the notified Structure Plan), in December 2016, MCCL have provided a revised Millbrook Structure Plan which will be discussed later in this evidence.

**6.2** In summary, the notified Structure Plan seeks to:<sup>7</sup>

- (a) extend the (operative) G (Golf and Open Space) Activity Area to the west, to include the Dalgleish Farm land;
- (b) amend the (operative) Structure Plan and zone boundaries to reflect the 'as built' condition of the Millbrook Resort Zone;
- (c) extend an (operative) R (Residential) Activity Area to include a portion of the Dalgleish Farm land;
- (d) establish new R Activity Areas within the Dalgleish Farm land;
- (e) establish a Landscape Protection (LP) Activity Area;
- (f) establish a Landscape Amenity overlay; and
- (g) relocate the Helipad Activity Area.

**6.3** I consider that the proposal to amend the operative Millbrook Structure Plan, to more closely follow the as built areas of existing development within the operative Resort zone, is a logical action that carries little or no adverse landscape effect.

<sup>7</sup> BDG Landscape Assessment Report, page 1, para 3.

## Methods

- 6.4** The Wharehuanui Landscape Study concludes the Dalgleish Farm site has a **moderate** ability to absorb further appropriate development within the lower hills and plateaus (of the *Upper Hills landscape unit*), and **moderate** ability to absorb further development at the base of the north facing escarpment (in the *Millers Flat landscape unit*).<sup>8</sup> This evaluation was used by BDG (who led the design process) to inform the planning of the notified Structure Plan, which includes Dalgleish Farm. I consider that this is an appropriate method to embark on the design process for the development of the Structure Plan.
- 6.5** As part of the design process, I understand that BDG worked with golf course consultant Greg Turner Golf and developed concept designs for the new 9-hole golf course.<sup>9</sup> I also understand that a number of other professional consultants were also engaged in the design process to provide their expertise on specialised aspects such as ecology, heritage, geology, survey and engineering.
- 6.6** In their Landscape Assessment Report (reviewed below), BDG indicate that any potential for adverse effects (of the notified Structure Plan) were identified early in the design process.<sup>10</sup> This included identification of neighbours or people using public places that might be adversely affected by the proposed Structure Plan design. The BDG Landscape Assessment Report goes on to explain that any potential adverse effects (such as the domination of buildings, roading and services over open space, diminished natural landform, excessive loss of vegetation and visual fragmentation), have been considered.<sup>11</sup>
- 6.7** I endorse this approach to the design process in principle, although I note that while the design process was meant to consider effects on neighbours, the notified Structure Plan did not avoid adverse effects on neighbouring properties to the south of the Dalgleish Farm. That said, I am now confident that the MCCL revised Millbrook Structure

8 Wharehuanui Landscape Study, (BDG), pages 29 and 34.

9 BDG Landscape Assessment Report, page 5, para 28.

10 BDG Landscape Assessment Report, page 3, para 10.

11 BDG Landscape Assessment Report, page 3, para 11.

Plan (discussed later in my evidence) addresses the adverse effects on neighbours.

## **Outcomes**

**6.8** The BDG Landscape Assessment Report states:<sup>12</sup>

*A new activity area, the Landscape Protection (LP) Activity Area is proposed to protect features that are considered to have significant natural landscape values. These include:*

- (a) *the rural lands immediately adjacent to Malaghans Road;*
- (b) *the upper parts of the north facing escarpment, which exists between Mill Creek and the upper hills; and*
- (c) *the slopes of the highest points of the upper hills.*

**6.9** I believe the LP Activity Areas are crucial to the overall Structure Plan and agree with this approach. These activity areas form the backbone to the residential and other open space activity areas. They enable proposed residential areas to be better absorbed into the wider landscape, and ensure the existing landscape character remains somewhat intact.

**6.10** Amenity Landscaping overlays have been included in the notified Structure Plan to ensure consistent repetition of landscape patterns that contribute to the overall amenity of the site.<sup>13</sup> I believe these are less critical than the LP Activity Areas, but are useful in ensuring a level of certainty around the location and size of amenity plantings, which may overlap various Activity Areas.

**6.11** Four Residential (R) Activity Areas and an extension of an existing Millbrook R area are also proposed within the Dalglish farm site. All buildings proposed within the R areas are to be assessed by the

<sup>12</sup> BDG Landscape Assessment Report, page 4, para 15.

<sup>13</sup> BDG Landscape Assessment Report, page 4, para 17.

Millbrook Design Panel against the (yet to be amended) Millbrook Design Guidelines.<sup>14</sup>

- 6.12** No amended Millbrook Design Guidelines have been made available by MCCL and it is understood that these will be submitted to QLDC for approval once the Dalglish Farm extension has been decided. Ideally they would be available during the course of the hearing, for review. I have had verbal communication with BDG to ascertain a preliminary understanding of the intended amendments to the Guidelines (the current version are attached in **Appendix 5**). In summary, I understand that although the typical character of the Millbrook vernacular will remain (characterised most distinctively by steeply pitched roofs, gable ends and chimneys), the colour palette in the upper portions of the site will be far more restricted (than the rest of Millbrook) to darker colours and natural materials that are even more recessive and sympathetic to the landscape surroundings. Buildings will be modulated to reduce their bulk appearance. Landscaping will be guided toward natural and native looking plantings, rather than containing exotic perennial plants and deciduous trees.<sup>15</sup>
- 6.13** The amended Millbrook Design Guidelines for the lower portions of the site, in the vicinity of the heritage listed cottage, will steer the architectural style of buildings to reflect the cottage and its pastoral setting. Buildings in these Residential areas will be more like the existing dwellings in Millbrook.<sup>16</sup>
- 6.14** I am generally comfortable with the general direction of the amended Millbrook Design Guidelines, although for those R Activity Areas on the upper slopes I do believe there should be some deviation from the typical Millbrook steeply pitched roof lines with gable ends and chimneys, to more innovative forms that better suit the surrounding topography. The upper slopes of the Dalglish Farm are unique in Millbrook, and therefore I consider they are far more sensitive to landscape, visual and ridgeline effects. I feel that in this unique context it would not disrupt the Millbrook vernacular to enable

14 BDG Landscape Assessment Report, page 4, para 18.

15 BDG Landscape Assessment Report, page 4, para 20.

16 BDG Landscape Assessment Report, page 4, para 21.

(through the guidelines) roof lines that blend themselves more effectively in the landscape.

- 6.15** My only other comment with regard to the Design Guidelines, is that I believe the strongly curved terrace retaining, which has become a signature feature of Millbrook, should be discouraged in residential areas of the Dalgleish Farm where more natural landscape characteristics should be encouraged. I understand the 'pancake' terraces originate from earlier stages of Millbrook where the houses fronted golf course fairways that occupied valleys. They have been continued as development has spread west (away from fairways), although they now appear to lack purpose and tend to be more of a token feature that gets repeated by default. I think any retaining, if required, should take on the more natural characteristics of the Dalgleish Farm.
- 6.16** I also consider that a rule or condition should be introduced to ensure MCCL submit the amended Millbrook Design Guidelines to QLDC for approval immediately following approval of the MCCL revised Structure Plan (or prior), but certainly before any development takes place.
- 6.17** While landscape and visual effects of the notified Structure Plan are discussed in the following section, from a master planning perspective I believe the notified Structure Plan has been well considered and is logically and comprehensively designed. The plan appears to involve a high proportion of open space to built-form, provide for amenity landscaping, protection of natural features and strategically located residential building clusters that sit well within the topography.

## **7. BDG LANDSCAPE ASSESSMENT REPORT – APRIL 2015**

- 7.1** BDG prepared a Landscape Assessment Report to support the extension of the operative Resort Zone to what was notified in the PDP as well as the notified Structure Plan, to include Dalglish Farm. The report identifies and assesses the potential landscape effects of the notified Structure Plan and proposes appropriate mitigation.
- 7.2** As previously noted, MCCL have since provided a revised Structure Plan and BDG have submitted an addendum to their assessment. In the MCCL revised Structure Plan the position of the Residential Activity Areas on the upper slopes has been relocated. This section of my evidence will predominantly discuss and review aspects of the landscape assessment that remain unchanged by the MCCL revised Structure Plan. Those areas affected by the MCCL revised Structure Plan will be identified, but discussed in greater depth later in this evidence.

### **Methodology**

- 7.3** I have no issues with the methodology that was used by BDG to carry out this landscape assessment. I consider that the assessment is thorough and uses best practice methodology.

### **Landscape Character Analysis**

- 7.4** I do not believe it is necessary to critique BDG's landscape character analysis, set out from page 6 of the BDG Landscape Assessment Report.<sup>17</sup> I find it to be very detailed and there is no aspect of the character description that I dispute.

### **Landscape Assessment**

- 7.5** BDG's assessment (and my review) specifically deals with the changes proposed outside of the operative Millbrook Zone, referred to generally as the Dalglish Farm site.

<sup>17</sup> BDG Landscape Assessment Report, page 6, para 35 to 67.

- 7.6** The ODP Planning Maps show the Dagleish Farm site as being within a Visual Amenity Landscape (**VAL**). VAL is a term used in the ODP to describe the region's picturesque rural landscapes and natural landforms that "*wear a cloak of human activity more obviously*".<sup>18</sup> I do not dispute this classification and am satisfied the site does not deserve Outstanding Natural Landscape (**ONL**) or Outstanding Natural Feature (**ONF**) classification (as used in the PDP).
- 7.7** BDG carried out a visual assessment that examines the visibility of the notified Millbrook Zone from what they have identified as key public view points from which the subject site is visible, and assesses the level of impact that the visibility will have on landscape character and amenity. In this section I have mainly focussed on those aspects of the assessment that I either strongly agree with or have a difference in opinion.

**Viewpoints on Malaghans Road (BDG Landscape Assessment Report, Appendix K)**

- 7.8** Malaghans Road is described by BDG as the public place where the view of the Dagleish Farm site is most often experienced. I agree.
- 7.9** In identifying the important view point locations along Malaghans Road, BDG point out that much of the southern boundary of Malaghans Road is densely planted in mature exotic trees that screen most views into Millbrook and Dagleish Farm. Through these trees only occasional glimpses of the Dagleish Farm site are afforded.<sup>19</sup> While I agree in part with the Report, in my opinion viewpoints along Malaghans Road should not necessarily be confined to the windows in roadside vegetation as the mature exotic trees cannot be relied on in perpetuity to provide screening. While I do not know the age of the trees, they will not live forever and they are not currently protected under the ODP or notified PDP. Furthermore, there are 4-5 months of the year when the deciduous trees will lose their leaves, enabling filtered views into the site.

<sup>18</sup> QLDC – Operative District Plan (July 2016), Section 4, page 8, para 3.

<sup>19</sup> BDG Landscape Report, page 12, para 75.

**7.10** I consider that the following three methods should be used to ensure the development of the Dalgleish Farm does not result in adverse visual and ridgeline effects:

- (a) the landscape and visual effects of the proposed development should be anticipated from a more comprehensive set of view shafts along Malaghans Road adjacent to Millbrook Resort and not just from the windows in existing vegetation;
- (b) for those houses located on the upper slopes of Dalgleish farm, alternative rooflines that deviate from the steeply pitched gabled roof to a form that better blends with the topography, should be considered; and
- (c) a new Roadside Planting (**RP**) Overlay should be introduced on the Structure Plan that encompasses those trees that currently perform a function of screening the development on Dalgleish Farm (from Malaghans Road). In addition, a rule should be established with regard to the RP Overlay in the Millbrook Zone chapter to ensure the ongoing maintenance and replacement of any trees within the RP Overlay (should they become ill thrift).

**7.11** The BDG Landscape Assessment Report states that heritage values of the site will be retained and enhanced by relocating a historic farm shed next to Malaghans Road, which "*will allow the public to better appreciate its heritage values*".<sup>20</sup> I understand (from verbal conversations with MCCL) that the farm shed will also be better located in this position to operate as part of the working farm areas of Millbrook.

**7.12** In my view, shifting the historic farm building to a site more visible from Malaghans Road is both advantageous from a functionality and aesthetic point of view. I understand (again from verbal conversations with MCCL) that the building is likely to be a partial reconstruction/restoration rather than a straight relocation due to the current condition of the building. This makes little difference in my

<sup>20</sup> BDG Landscape Assessment Report, page 16, para 110.

opinion, so long as the building is restored to reflect the historical vernacular.

**7.13** Buildings that are erected in the Residential Activity Areas R14, R15, and R16 activity areas (as shown on the notified Structure Plan), which are located on the upper slopes of the Dalgleish Farm site, are likely to be most visible in more distant views of the site from Malaghans Road, Cotter Ave and Feeley Hill. The position of the Residential Activity Areas on the upper slopes has been altered in the MCCL revised Structure Plan and therefore will be discussed in greater depth later in this evidence.

**7.14** Those buildings in elevated portions of Residential Activity Areas R13 and R17 on the lower slopes of the north-facing escarpment by Mill Creek are likely to be the most visible buildings from Malaghans Road. These buildings are proposed to appear as a continuation of a similar design character and density to the clustered residences of the operative Millbrook Resort Zone.<sup>21</sup>

**7.15** The BDG Landscape Assessment Report also states that:<sup>22</sup>

*The visibility if the lower R areas near Mill Creek will have a low adverse effect on the visual amenity and character of the landscape as experienced from Malaghans Road. This is mainly attributed to the strategic location of activities within the site which maintain and enhance rural and natural character.*

**7.16** I agree in part with this statement. However I consider that the assessment lacks detail on its justification as to why visibility of residential development in any capacity on the Dalgleish Farm site is acceptable. I believe it would be better to acknowledge that there is going to be a considerable change in the landscape character of the Dalgleish Farm site. The landscape will obviously change from undeveloped farmland to a landscape that is quite obviously modified by golf activities and residential development. Effects on landscape character will therefore be substantial. Nevertheless, not all effects

21 BDG Landscape Assessment Report, page 12, para 80.

22 BDG Landscape Assessment Report, page 12, para 81.

must be adverse. In this case, retention of open space, good quality architecture and amenity landscaping regulated by the (to be amended) Millbrook Design Guidelines will ensure visual amenity will arguably remain high.

**7.17** As previously discussed, I believe the Dalgleish Farm site has a **moderate** ability to absorb change because of the complex topography that is able to effectively hide buildings without affecting landscape amenity. Given the R13 and R17 Activity Areas will be visible from Malaghans Road and will appear as a continuation of the existing Millbrook development, I assess the visibility of lower Residential areas to create a moderate change to the existing landscape character. When viewed in context of the proposed site design, this will have a **low adverse** effect on landscape character and visual amenity.

**7.18** The BDG Landscape Assessment Report concludes that:<sup>23</sup>

*Overall, it is considered that the proposed development will not adversely affect the landscape character or visual amenity as experienced from Malaghans Road.*

**7.19** I agree in part. I consider that the notified Structure Plan will noticeably alter the landscape character of the Dalgleish Farm site and its immediate surrounds and will have a slightly adverse effect on the landscape character and visual amenity as experienced from Malaghans Road. That said I believe a change of character need not necessarily be adverse as long as the amenity or quality of the environment is either maintained or enhanced. In this case key elements of openness, natural landform and vegetation will generically remain intact, and any buildings present will be of high quality architecture and well integrated with the landscape.

23 BDG Landscape Assessment Report, page 13, para 87.

## Viewpoint on Feeley Hill (BDG Landscape Assessment Report, Appendix L)

**7.20** The summit of Feeley Hill is identified in the Report as an important public view point location from which to assess the effects of the proposed development as most of it will be visible.<sup>24</sup> I agree. Feeley Hill is a steep roche moutonnée landform carved by glaciers and unique to the glacial landscapes of the region. It is shown as an ONF on PDP Planning Map 27 – Arrowtown. The summit is accessible by a public walking track.

**7.21** The Report concludes that:<sup>25</sup>

*Overall, the visibility of the proposed development will have **low to very low adverse effect** on the landscape character and visual amenity as experienced from Feeley Hill ... attributed to the distance between the two locations, retention of open spaces within the site, protection of the upper ridge and application of the amended Millbrook Design Guidelines.*

**7.22** While I agree with this statement in part, I also consider that the assessment lacks discussion around the fact that there will be a noticeable change in the landscape, and the potential cumulative effects that may be experienced from this viewpoint.

**7.23** I note that in the zoomed in photograph labelled *Indicative Bulk and Form of Buildings and Landscaping* (BDG Landscape Assessment Report, Appendix L) there is no indication of the bulk and form of the buildings in lower R areas (R13, R17 and R18), which makes it difficult to comprehend the full visual effect. Furthermore, there is no discussion in the assessment regarding the visual effects of the lower R areas. The photograph provided in Appendix L is also slightly misleading in that vegetation visible on the site will not all remain as it exists in the photograph. I acknowledge this is not intended to be a visual simulation but this factor is important to note when considering the overall visual effects of the Dalgleish Farm extension.

<sup>24</sup> BDG Landscape Assessment Report, page 13, para 89.

<sup>25</sup> BDG Landscape Assessment Report, page 14, para 93.

- 7.24** In my opinion, from this view point the Dagleish Farm extension will cause the Millbrook Resort to appear noticeably larger than it is at present, especially when you take into consideration the extent of consented development at Millbrook yet to be constructed. Although development is moving in a westerly direction away from Feeley Hill, Millbrook Resort (which already dominates the foreground of the view) will appear to occupy a larger portion of the mid-ground landscape. I believe there will be a **slight to moderate** visual effect arising from the extended development. Once again it is a question of whether that change will have adverse effects on the landscape and visual amenity of the wider landscape as experienced from this location.
- 7.25** Millbrook Resort has a landscape character that is distinct from the rural landscape that surrounds it. While the landscape is clearly modified and clusters of residential development are present, large areas of manicured open space penetrate the landscape and there is a significant amount of amenity tree planting. I consider the presence of these attributes to contribute a high level of visual amenity.
- 7.26** From Feeley Hill, additional development as proposed by the notified Structure Plan, will contribute a noticeable addition to the existing landscape pattern of Millbrook., although I believe this addition is not likely to alter the way people appreciate the landscape from this viewpoint. I therefore agree with the conclusion in the BDG Landscape Assessment Report that overall the increased area in the notified Structure Plan will have a **slight/low adverse effect** on the landscape and visual amenity of the wider context when viewed from the summit of Feeley Hill.
- 7.27** Although BDG's Landscape Assessment Report lacks discussion around cumulative effects, I am comfortable that the notified Structure Plan does not exceed a threshold where proposed development in combination with existing development creates an adverse cumulative effect on the overall landscape. Continual creep of built form in the rural landscape, preceded by existing built form, is obviously a threat to rural character in the Wakatipu Basin.

Sometimes it is difficult to know where to draw the line around developed areas. In this case I am satisfied that the existing landform of Malaghans Ridge and sheer escarpment to the west - southwest, Malaghans Road to the north, and privately owned rural zoned properties to the south effectively contain the Millbrook Resort and would deter continual creep of future development in a westerly direction.

### **Cotter Avenue (BDG Landscape Assessment Report, Appendix M)**

**7.28** From my site visit I ascertained that at present only the newest part of Millbrook (currently under construction) can be seen from this view point due to trees in the mid ground that screen the rest of the resort from view. Development within the Residential Activity Areas near Mill Creek is not likely to be visible from this view point as this elevation is screened by the same vegetation. However, Residential Activity Areas on the upper slopes will be visible.

**7.29** I agree with the BDG Landscape Assessment Report<sup>26</sup> that the amended Millbrook Design Guidelines should restrict the appearance of buildings will make the Residential Activity Areas on the upper slopes of the proposed Millbrook extension relatively difficult to see in distant views from Cotter Avenue (although noting that no amended Guidelines have been produced by MCCL at this point).<sup>27</sup> I note that these Residential Activity Areas are ultimately superseded by the MCCL revised Structure Plan and will be discussed in more detail later in this evidence.

26 BDG Landscape Assessment Report, dated April 2015.

27 BDG Landscape Assessment Report, page 14, para 96.

## North Lake Hayes Recreation Area Access (BDG Landscape Assessment Report, Appendix N)

**7.30** The MCCL revised Structure Plan has been altered so that visibility of development on the Dalgleish Farm extension will be negligible from this public view point. I will therefore skip over this part of the assessment and will return to discuss this view point later in my evidence.

### Other Public Views

**7.31** Other viewpoints identified in the BDG Landscape Assessment Report as public locations where the Dalgleish Farm extension might be visible include:

- (a) Tobins Track;
- (b) The Crown Range Zig Zag; and
- (c) Coronet Peak Ski Area and Access Road.

**7.32** I agree with the Report that the Dalgleish Farm extension will have a **negligible** effect on the landscape character and visual amenity of the wider landscape as experienced from Tobins Track and the Crown Range Zig Zag.

**7.33** I also agree that although the Dalgleish Farm extension will be visible in distant views from the Coronet Peak Ski Area and access road, the expanse of the view shaft and the scale of the proposed development next to the existing landscape character of Millbrook, is not significant enough to lead to adverse landscape, visual or cumulative effects.

### Cultural Heritage

**7.34** I agree with the BDG Report's assessment of cultural heritage values.<sup>28</sup> I support the conclusion that the proposal has a number of positive effects with regard to enhancing heritage values.

28 BDG Landscape Assessment Report, page 16, para 110 to 114.

## **Natural Environment**

- 7.35** I agree with the Report's assessment of natural environment values.<sup>29</sup> I believe the Dagleish Farm extension has a number of positive effects with regard to enhancing the natural environment, including, enhancement of the existing Mill Creek waterway, the removal of exotic tree species and the establishment of native shrubs and trees.

## **Conclusion**

- 7.36** In conclusion, while focussing only on the landscape character analysis and those landscape activity areas that remain unchanged in the revised structure plan, in general I agree with BDG's landscape assessment of the Dagleish Farm extension as shown in the notified Structure Plan. While some aspects of the assessment I feel deserve further explanation and justification, overall I draw similar conclusions with regard to assessing the level of adverse landscape and visual effects of the proposal from the various viewpoints as being no more than low/slight.

## **8. SUMMARY OF SUBMISSIONS ON THE NOTIFIED STRUCTURE PLAN (WITH REGARD TO LANDSCAPE MATTERS)**

- 8.1** It is important to note that all submissions summarised below were made on the notified Millbrook Zone Chapter and Structure Plan. MCCL has since submitted a revised Structure Plan and revised Millbrook Zone Chapter in response to submissions. To avoid repetition, I reserve my discussion on the submission topics listed below until later in my evidence, after all of the revised material submitted by MCCL in response to submitters has been discussed.

### **QLDC 383 – Building Heights (R13)**

- 8.2** QLDC (383) raised concerns about the rules around buildings height in R13 Residential Activity Area. Both the notified chapter and the MCCL revised chapter (at Rule 43.5.4) control height in the R13 Residential Activity Area. A height of 8m is proposed for a number of

<sup>29</sup> BDG Landscape Assessment Report, page 17, para 115 to 118.

listed buildings, 12m for filming towers, 4m for other buildings and structures.

### **QLDC 383 – Night Sky**

8.3 QLDC (383) seeks to amend the title of Rule 43.5.6 – Glare, to include '*and the Night Sky*'. I understand that a similar amendment was discussed in the Council's legal right of reply for the Business Hearing stream, and it was determined that it would be difficult to know if compliance was achieved or not with a rule controlling effects on the night sky, and was therefore considered *ultra vires*. I therefore consider that this amendment should be rejected for similar reasons.

### **Skipp Williamson 499 – Management of the Landscape Protection (LP) Activity Area**

8.4 With regard to management of the LP Activity Area, submitter Skipp Williamson (499) suggests:

- (a) adding a new policy to avoid all buildings and golf courses in the Landscape Protection Activity Area to the west of R15 and R16;
- (b) opposing rules regarding commercial recreational facilities as discretionary activity (seeks that such activity be non-complying);
- (c) supporting the 42.4.12 which states all golf courses are non-complying in LPA; and
- (d) amendment to rule with regard to buildings in LPA adjacent to Malaghans Rd.

### **Submissions 14, 356, 234, 346, 541, 558, 559, 446 – Expansion of the Millbrook Zone to include Dalgleish Farm**

8.5 Eight submitters oppose the proposed expansion of the Millbrook Zone to include the Dalgleish Farm. All submitters are either neighbours or residents of Millbrook.

- 8.6** Of the eight submitters who oppose the expansion of the Millbrook Zone to include the Dalgleish Farm, six submitters (Egerton (234), Egerton (346), Boundary Trust (541), Spruce Grove Trust (558), Spruce Grove Trust (559) and Donaldson (446)) oppose the expansion unless their own land is included in the zone extension. This is not considered to be a landscape and visual amenity issue, so I will therefore leave discussion around these submissions to other experts.
- 8.7** Siddall and Tweedie (14) are residents of Millbrook. They oppose the expansion in its entirety as they anticipate adverse effects on the amenity of existing Millbrook residents. Their concerns are predominantly to do with noise and reduced safety from increased traffic movement, rather than landscape and visual amenity, and therefore I do not address this submission in my evidence.
- 8.8** X-Ray Trust (356) is the owner of the property that shares the southern boundary of the Dalgleish Farm with Millbrook. Donaldson (446) owns the property that borders the eastern boundary of the expansion. Each of these submitters oppose the inclusion of the Dalgleish Farm on the basis that proposed development (as per the notified Structure Plan) will have a significant adverse effect on the existing landscape and visual amenity experienced from their properties.
- 8.9** X-Ray Trust engaged Anne Steven Landscape Architect to carry out a landscape assessment and propose a suggested layout for development on the Dalgleish Farm, which was lodged as part of their submission. Ms Steven's expert opinion is discussed in the following section of this evidence.
- 8.10** It is important to note that X-Ray Trust has since provided their written approval of the MCCL revised 'package', which was prepared in response to this submission (see Appendix 6 of the s42A report).

**9. ANNE STEVEN EXPERT OPINION (OCTOBER 2015) – SUBMITTED BY X-RAY TRUST [356]**

**9.1** As mentioned Anne Steven Landscape Architect was engaged by X-Ray Trust (356) (who is an immediate neighbour of Millbrook), to provide her expert opinion on the potential impact on private amenity and appropriateness of the Dalgleish Farm extension.<sup>30</sup> The report was provided with the X-Ray Trust submission that initially opposed the Dalgleish Farm extension, and is attached in **Appendix 3**. It is important to note that much of Ms Steven's report relates to the part of the Dalgleish Farm extension which has subsequently been amended in the MCCL revised Structure Plan, and since confirmed as approved by the X-Ray Trust. However, the Council must consider submissions on the notified provisions and therefore I consider Ms Steven's expert opinion, noting that some points are no longer relevant when applied to the MCCL revised Structure Plan.

**9.2** The X-Ray Trust property, named Ayrburn Farm, shares the southern boundary of Dalgleish Farm, and contains two consented building platforms which are positioned to face north overlooking the upper plateau of Dalgleish Farm. I agree with Ms Steven that notified R14, R15 and R16 Activity Areas of the notified Structure Plan are located within the favoured view of the two building platforms owned by X-Ray Trust.<sup>31</sup> I also agree with Ms Steven that the landscape amenity as experienced from the X-Ray Trust's property (specifically building platforms) will be adversely affected by R14, R15 and R16 Activity Areas of the notified Structure Plan, regardless of amenity planting, retention of open space, and Millbrook Design Guidelines restricting and controlling the appearance of buildings.<sup>32</sup>

**9.3** However, I consider these points are no longer relevant as R14, R15 and R16 Activity Areas have been subsequently relocated in the MCCL revised Structure Plan to avoid adverse effect of visual amenity from the two building platforms on Ayrburn Farm.

30 Anne Steven Expert Opinion, dated October 2015.

31 Anne Steven Expert Opinion, page 1.

32 Ibid.

- 9.4 With regard to other aspects of the proposed extension to the Millbrook Zone, Ms Steven has expressed the following in her report:

*the R14/15/16 areas are located on elevated landform units in an unprecedented manner that is inconsistent with existing landscape character of spaced individual dwellings on small rural land holdings where dominance of open space and productive pastoral or arable land use is maintained...*<sup>33</sup>

- (a) In response, I agree in part that the development being proposed is unprecedented and that the existing landscape character will change, but believe there are locations within this hummocky landform of the plateau (in the landform depressions around the hillocks) that can absorb appropriate development without adversely affecting landscape character of the wider landscape unit.

*There is potential for ridgeline and skyline effects (in views from Malaghans Rd)...*<sup>34</sup>

- (b) In response, I believe ridgeline effects will be very marginal and will be barely noticeable, as they will exist against a backdrop of mountains. The coarse texture of the Dalgleish Farm landscape (created by vegetation and landform) and the varied ridgeline assists in mitigating ridgeline effects.

*Built development is very close to Malaghans Ridge landscape feature and somewhat diminishes its natural character...*<sup>35</sup>

- (c) I disagree with this statement. Although development will nestle below the Malaghans Ridge landscape feature, a fairway will exist between the residential area and the steeper ridge landform form. I am unconvinced

33 Anne Steven Expert Opinion, page 4.

34 Anne Steven Expert Opinion, page 4.

35 Ibid.

development in this location will diminish its natural character.

*The proposed LP areas do not adequately contain the areas needing to be protected for their natural and pastoral character...*<sup>36</sup>

- (d) It is my understanding that the LP areas are not intended to preserve the landscapes existing pastoral character. They are more about ensuring protection of natural features such as rocky outcrops, valleys and streams, which contribute to a high level of visual amenity within the new golf resort landscape.

*R14/15/16 are not appropriate areas for built development of the kind proposed... Possible two to three private dwellings could be located on the elevated landforms*<sup>37</sup>

- (e) The R14/15/16 Activity Areas have been relocated in the MCCL revised Structure Plan.

*R13/17/18 need to be pulled back down off the scarp to avoid prominence..*

- (f) Although I agree that the upper portions of development in R13 and R17 Activity Areas will be visually prominent from Malaghans Road, I believe their level of visibility is acceptable in the context of the golf resort landscape.

*Golf course elements are not considered appropriate on the upper landforms*<sup>38</sup>

- (g) Although golf course elements on upper land forms will be visible from neighbouring properties, I believe the visibility of these areas will be negligible from public places, except distant elevated viewpoints.

<sup>36</sup> Anne Steven Expert Opinion, page 5.

<sup>37</sup> Anne Steven Expert Opinion, page 5.

<sup>38</sup> Ibid.

*There is significant sprawl of housing away from Arrowtown in a westerly direction, which will be exacerbated by the proposed extension.... Built development of the kind expressed in the resort should be restricted to and contained by the basin floor.<sup>39</sup>*

- (h) Although I agree with the first part of this statement, I am comfortable that Malaghans Ridge and the sheer escarpment to the west of the site form a natural barrier to prevent further creep of built development in a westerly direction. Furthermore, MCCL has not indicated there would be any benefit in expanding beyond a 36 hole course.

**9.5** With regard to Ms Steven's assessment and graphic attachment provided with the X-Ray Trust submission, her view points from Malaghans Road (Views 2a and 2b) are from the inside of the tree line that the BDG Landscape Assessment Report recognises as screening the majority of the site in views from Malaghans Road. As I have previously highlighted, the trees planted along Malaghans Road lose their leaves seasonally and may not always exist, so I consider that Ms Steven's view point location is valid. That said, the trees do perform a screening (or filtering) function from the road at present and I believe there should be a rule in place that requires the replacement of removed or ill thrift trees to ensure there is always a reasonable level of screening along this boundary.

**9.6** In her view point photograph from Feeley Hill (View 7), Ms Steven has superimposed 'urban development' within the proposed Residential Activity Areas to highlight their level of visibility. These are not accurate visual simulations of the permitted development (which will be carefully placed and restricted to ensure colours are much darker and more recessive). I therefore do not believe these superimposed photographs are useful in determining the actual level of visibility of development, as they are not an accurate representation of what is being proposed.

39 Anne Steven Expert Opinion, page 4.

**9.7** I am also of the opinion that Ms Steven's distant viewpoints (Views 3, 4 and 6) highlight the fact the wider landscape context overwhelms the small areas of additional development. These areas of development would be difficult to recognise in the wider landscape setting if one did not know what to look for, and therefore adverse effects would be considered as low/slight.

## **10. MILLBROOK (696) – RESPONSE TO SUBMISSIONS**

**10.1** MCCL (696) made submissions and multiple further submissions during the submission period. Many of these were in response to submitters and were on topics unrelated to landscape. In response to those submissions opposing the Dalgleish Farm extension and following negotiations with some submitters (including X-Ray Trust). The information provided by MCCL to QLDC on 2 December 2016 included an amended Structure Plan and an addendum to BDG's landscape assessment report,<sup>40</sup> to support the changes. These two revised documents are discussed below.

### **MCCL revised Millbrook Structure Plan – December 2016**

**10.2** In summary, the following changes have been made to the MCCL revised Millbrook Structure Plan:<sup>41</sup>

- (a) considerable portions of R Activity Areas R14, R15 and R16 have been amended. These amendments have generally moved residential activity away from the southern portion of the site and relocated them to more central parts of the site;
- (b) part of the LP Activity Area has been removed to allow for additional Golf course and Open Space (G) Activity Areas;
- (c) the Ecological Protection and Restoration Overlay has been removed and a Gully Planting (GP) and Open Planting (OP) Overlay has been proposed in its place;
- (d) Earthworks Overlays (E1 and E2) have been proposed to indicate where earthworks will be undertaken to mitigate against effects of development on neighbouring properties;

40 BDG Landscape Assessment Addendum, dated November 2016.

41 BDG Landscape Assessment Addendum, page 1, para 3.

- (e) specific height controls have been added for indicative residential sites in much of the more elevated R14 R15 and R16 areas to provide more certainty as to built form outcomes;
- (f) a recession plane rule has been added and reduced levels have been set for the more northerly lots to reduce visibility of future buildings in the R16 Activity Area, from public views; and
- (g) a setback rule has been added to the R15 area and additional planting is proposed to the north to reduce the public visibility of future buildings in this Activity Area.

**10.3** The combined changes have resulted in an overall reduction in R Activity Area by 1.88ha.<sup>42</sup> The LP Activity Area has been reduced by 2.10ha.<sup>43</sup>

**10.4** The MCCL revised Structure Plan retains a high proportion of open space to built form, amenity landscaping and enhanced natural features. It plans for high quality residential building clusters that are vetted against a set of design guidelines that ensure future buildings are sympathetic to the landscape that surrounds them. For completeness I confirm that the notified Structure Plan also appears to meet all of these components described above.

### **BDG Landscape Addendum Report – December 2016**

**10.5** In their Landscape Addendum Report, BDG considers that the amendments in the MCCL revised Structure Plan will marginally reduce the effects of the possible development's visibility as viewed from more distant places<sup>44</sup> (as identified in BDG's first landscape assessment outlined above). I agree with this conclusion.

**10.6** BDG's assessment of the MCCL revised Structure Plan concentrates on the effect of the proposal as viewed from Malaghans Road, as it is

<sup>42</sup> BDG Landscape Assessment Addendum, page 2, para 5.

<sup>43</sup> Millbrook Structure Plan Zone Changes Plan, dated 28 November 2016.

<sup>44</sup> BDG Landscape Assessment Addendum, page 3, para 12.

considered to be the public place where an adverse change in effect is most likely.<sup>45</sup> I agree with this approach.

**10.7** BDG considers that:<sup>46</sup>

*The suggested amendments to the Structure Plan will bring proposed R Activity areas on the upper slopes slightly farther north, closer to Malaghans Road. This has the potential to increase the presence of built form... and will have a slight adverse effect on visual amenity as experienced from Malaghans Road ... There will be opportunities for an increase in ridgeline breaks...*

**10.8** I agree with BDG's evaluation above, and that the MCCL revised Structure Plan will have a slight change in effects on the visual amenity as experienced from Malaghans Road when compared to the notified version. I am confident that the additional mitigation controls proposed by MCCL are an appropriate measure to reduce the potential landscape and visual effects of buildings in the amended locations.

**10.9** BDG reiterates the presence of densely planted mature exotic trees along the southern boundary of Malaghans Road within which only two openings in the trees allows views into the site. These openings mark the location of their chosen viewpoints along Malaghans Road.<sup>47</sup> I maintain the opinion that these trees should not solely be relied upon for screening because they are deciduous and not necessarily a permanent feature.

45 BDG Landscape Assessment Addendum, page 3, para 13.

46 BDG Landscape Assessment Addendum, page 3, para 15 and page 6, para 39.

47 BDG Landscape Assessment Addendum, page 3, para 14.

**10.10** I would agree with BDG that:<sup>48</sup>

*Most of the proposed changes have been driven by responses to submitters toward the south of the Dalgleish land and as such, potential effects on those properties are significantly reduced by the amended proposal.*

**10.11** I believe the MCCL revised Structure Plan appropriately addresses the concerns of the X-Ray Trust (356). Visibility of any buildings will be limited and open space will be maintained. Strategic earth shaping and amenity planting will assist in screening some of the modified golf course greens, without adversely affecting the wider views of the rural landscape. Although the golf course will be partially visible, this type of land use is not new or foreign in the wider setting, and may be viewed as an extension of the existing landscape.

## **11. RESPONSE TO SUBMISSION TOPICS (RELATED TO LANDSCAPE)**

**11.1** This section summarises my response to submissions following receipt of the MCCL revised Structure Plan and MCCL revised Millbrook Resort Chapter Rules, which address a number of the submission points raised in opposition.

### **Extension of Millbrook zone to include Dalgleish Farm**

**11.2** This submission topic has been discussed at length throughout this evidence. In summary, I agree with the conclusions in the BDG Landscape Assessment Report that the Dalgleish Farm site has a **moderate** ability to absorb appropriate development in strategic and specific locations. I believe including this land as part of the Millbrook Zone and developing the land as per the MCCL revised Structure Plan will not be detrimental to the existing landscape amenity values of the Wakatipu Basin.

**11.3** I reiterate that I believe the MCCL revised Structure Plan appropriately addresses the concerns of the X-Ray Trust (356), and I understand this has also been confirmed by the X-Ray Trust.

48 BDG Landscape Assessment Addendum, page 4, para 23.

- 11.4** My opinion is that by including the Dalgleish Farm land within the Millbrook Zone, the landscape is able to be comprehensively master planned and developed most appropriately. I am confident that tight controls over the type, location and appearance of development which are governed by the MCCL revised Structure Plan, the MCCL revised Millbrook Chapter rules and the (to be) amended Millbrook Design Guidelines adequately protect the landscape from potential adverse effects.

### **Landscape Overlays**

- 11.5** Under notified 43.1 Resort Zone Purpose sections of the MCCL revised Millbrook Chapter rules, MCCL have suggested amendments to the type and description of the Structure Plan overlays, including:
- (a) Amenity Management Overlay (**AM**), which is proposed to be renamed: Amenity Landscape Overlay (**AL**). The description of the Overlay is also revised so that it is no longer exclusive to ensuring avoidance of unreasonable adverse amenity effects on just neighbouring properties. I have no issue with the renaming or the description changes suggested by MCCL.
  - (b) Ecological Protection and Restoration Overlay (**E**) has been deleted and replaced with Gully Planting (**GP**) and Open Planting (**OP**) Overlays. The description of the Overlay has also been altered to focus less on protecting existing ecological values and more on establishing areas of ecological restoration. I believe the last part of the description *'in the South Dalgleish area of the Zone'* may be deleted as the overlays occur across the whole Dalgleish Farm area. I am also comfortable that although the specific Ecological Protection Overlay has been deleted, the replacement overlays will be sufficient to protect and enhance ecological values of the site.

- (c) Earthworks Overlays (**E1** and **E2**) have been added to the set of Structure Plan overlays to identify those areas where earthworks are to be undertaken to mitigate visual effects of proposed development from properties neighbouring Dagleish Farm. I support the addition of this Overlay as I believe it will be a more effective form of mitigation than just planting along the boundaries of neighbours concerned.
- (d) Indicative Residential Sites have also been identified on the Structure Plan to establish the locations of future buildings on the upper slopes of the site, and specific height limits and recession planes for each site. I support the addition of this overlay and believe it is important to effectively controlling individual building sites.

**11.6** As previously mentioned under 7.10 of my evidence, I believe a further Roadside Planting (**RP**) Overlay (as per the indicative diagram in Appendix 6 of this evidence) should be introduced on the Structure Plan that encompasses those trees that currently perform a function of screening the development on Dagleish Farm (from Malaghans Road). A rule also should be established with regard to the RP Overlay in the Millbrook Zone chapter to ensure the ongoing maintenance and replacement of any trees within the RP Overlay (should they become ill thrift).

### **Building heights in R13 Activity Area**

**11.7** QLDC (383) raised concerns about the rules around building heights in R13 Residential Activity Area. In the notified Chapter, a maximum building height of 8m in the R13 Activity Area is proposed (as set out in both the notified and MCCL Rule 43.5.4). I believe this is an acceptable height given the hillside that exists in the backdrop behind the Activity Area (when viewed from Malaghans Road). The R13 Activity Area is viewed at such a distance (from Malaghans Road) that a building that is 6m in height or 8m in height would appear very similar.

### **Building heights and recession planes in R14, R15, R16 and R17 Activity Areas**

- 11.8** I am comfortable with the building height and recession plane restrictions proposed by MCCL, as set out in MCCL Rule 43.5.5. However, I consider that rather than listing the RL heights and recession plan details in the rules, these heights could be listed in the amended Millbrook Design Guidelines.

### **Building density in R13 and R17 Activity Areas**

- 11.9** While residential density in R14, R15, R16 and R17 Activity Areas is controlled by both the notified and MCCL Rule 43.5.3, maximum residential density in R13 and R17 is not guided by any rules. I recommend some assurance should be provided that the maximum density of lots will be a continuation of the existing residential density of R12. This would result in a maximum of 10 lots in R13 and 7 lots in R17. I am comfortable that the MCCL proposed density limits for R14, 15, 16 and 18 are appropriate for protecting landscape, visual and heritage values within the more sensitive parts of the site.

### **Management of the Golf Course and Open Space Activity Area (G)**

- 11.10** Golf Course and Open Space (G) Activity Areas are allocated on the notified Structure Plan to provide for outdoor recreation activities and open space.
- 11.11** Under Rule 43.4.7 of the notified Millbrook Chapter, buildings in G areas (except for utilities, service and accessory buildings up to 40m<sup>2</sup> in gross floor area) are a *discretionary* activity. I am comfortable that the rules around buildings in the G Areas are sufficient to protect them from inappropriate development.

- 11.12** Under Rule 43.5.11 of the notified Millbrook Chapter (Golf Course Development):<sup>49</sup>

*Development of more than 27 holes of golf shall not take place without a plan being approved by QLDC and its implementation secured via condition of consent or consent notice.*

- 11.13** The rule then goes on to outline those commitments required for QLDC approval. I agree with all of the listed commitments as set out in the MCCL revised Millbrook Chapter, apart from the plant lists. I believe the plant lists should form part of the (amended) Millbrook Design Guidelines rather than listed in the rules. I understand plant lists become too onerous to monitor and enforce as a District Plan rule. I believe species lists within the Millbrook Design Guidelines would be sufficient to guide appropriate plant species.

#### **Management of the Landscape Protection Activity Area (LP)**

- 11.14** The LP Activity Areas are proposed on the MCCL revised Structure Plan to protect and manage sensitive landscape areas in a manner that prevents inappropriate development.
- 11.15** Skipp Williamson (499) raises concerns over the management of the LP Activity Area and suggests that rules should be in place to further restrict buildings, particularly to the west of R15 and R16 and in the LP Activity Area adjacent to Malaghans Rd.
- 11.16** I agree in part with Skipp Williamson. In the MCCL revised Millbrook Chapter, a golf course in the LP area is a *non-complying* activity (as at Rule 43.4.12). Buildings in the LP areas are also a *non-complying* activity, except for utility buildings up to 25m<sup>2</sup> in gross floor area, and farm buildings in the part of the Activity Area that fronts Malaghans Road (as at Rule 43.4.13). I agree in part with Skipp Williamson that buildings in all LP Activity Areas should be a *non-complying* activity.
- 11.17** However, I disagree with Skipp Williamson with regard to the activity status of farm buildings in the Activity Area that fronts Malaghans

49 MCCL Revised Millbrook Resort Zone Chapter, page 43-7.

Road. I believe the LP Activity Area adjacent to Malaghans Road may contain one existing farm building relocated from within the site (and restored), as a *controlled* activity. My view with regard to Farm Buildings is described in the next section of my evidence.

- 11.18** Skipp Williamson (449) also opposes the *discretionary* activity status of commercial recreation activities (except for golf courses and within the recreation facilities activity area or village activity area), as per Rule 43.4.11, and suggests these should be a *non-complying* activity. I disagree with the *non-complying* activity status and believe the *discretionary* activity status is sufficient to ensure only appropriate commercial recreation activities are allowed.

### **Farm Buildings**

- 11.19** Farm buildings in all activity areas aside from the LP areas as set out in Rule 43.4.13 (both the notified and MCCL rule) and the E1 and E2 Areas as set out in MCCL Rule 43.4.24 are proposed as a *controlled* activity pursuant to (notified and MCCL) Rule 43.4.2. The Council would maintain control over effects on heritage and landscape values.
- 11.20** Although there is no scope in the submissions to specifically comment on the activity status of farm buildings in all Activity Areas, as a general comment on the rules I believe all new farm buildings should be limited to G and LP areas only, where they should be *discretionary* activities. I consider that relocation and extension of an existing farm building in the LP Activity Area Adjacent to Malaghans Road should be a controlled activity.
- 11.21** I think it is important that new farm buildings be a *discretionary* activity, as they can take on many shapes and sizes, and provide character to the landscape. While I acknowledge that farm buildings are necessary for the farming functions of the resort, this is no longer a rural zone landscape where there are other controls to ensure cumulative effects are avoided and landscape values are protected. Any buildings that are not subject to the same strict controls around location and visibility (as for residential buildings) could lead to adverse cumulative effects in this landscape where built development

is carefully considered and strictly controlled. I consider that all buildings should be subject to an assessment that considers the location, height, bulk and appearance of all buildings, with particular regard to cumulative effects.

## **Earthworks**

**11.22** I am comfortable with the MCCL rule under 43.5.11 regarding earthworks in Earthworks Overlays. It is understood that all earthworks in excess of 100m<sup>3</sup> is controlled as a restricted discretionary activity or a discretionary activity (for bulk earthworks in excess of 50,000m<sup>3</sup>) under the Operative QLDP Earthworks Chapter 22. The Millbrook Zone would fall under Tier 7 in Table 22.1.<sup>50</sup>

## **12. CONCLUSION**

**12.1** In conclusion, I am comfortable with the MCCL revised Millbrook Structure Plan except that I recommend an additional Roadside Planting Overlay be introduced, that encompasses those trees that currently perform a function of screening the development of Dalgliesh Farm (from Malaghans Road). I am generally comfortable with the MCCL revised Millbrook Chapter, as it relates to my area of expertise, except that I have made several suggestions to refine some of the rules and addition of others, to ensure rules are effective (and enforceable) in achieving the policies and objectives of the zone and the wider District.

**12.2** In my opinion, the landscape analysis phase of the project that informed the design of the Structure Plan, combined with input from neighbours during the submission period, has resulted in a well-considered outcome for the future of Millbrook. I consider BDG's assessment of landscape and visual effects of the proposed development to be mostly accurate. Although some areas of the visual assessment lacked detail and justification, I agree with most of the concluding statements regarding the degree of landscape and visual effects.

50 QLDC Operative District Plan, Chapter 22 – Earthworks, at page 9.

- 12.3** I believe the MCCL revised 'package' (with some further modification) is effective in addressing the landscape-related concerns of submitters.
- 12.4** My outstanding concerns lie with the design controls that will govern the future form and appearance of housing and landscaping on the upper slopes of the Dalgleish Farm. It is important that the architectural form of buildings and associated landscaping merge with the existing landforms to ensure potential visibility from Malaghans Road is minimised.
- 12.5** The amended Millbrook Design Guidelines have not yet been provided by MCCL. I would recommend it is critical these are submitted to QLDC for approval immediately following the approval of the extension of the Dalgleish Farm component of the zone, and before any development takes place.



**Hannah Mary Ayres**

**17 January 2017**

**APPENDIX 1**

**WHAREHUANUI LANDSCAPE STUDY BY BAXTER DESIGN GROUP**

**DATED JANUARY 2015**

# Wharehuanui Landscape Study



Prepared by Baxter Design Group  
January 2015



# Wharehuanui Landscape Study

DISCUSSION DOCUMENT



Prepared for  
Millbrook Country Club Limited  
By  
Baxter Design Group

January 2015

## Contents

1.0	Introduction	4
2.0	Executive Summary	5
3.0	Methodology	5
<b>PART 1: Description and Inventory</b>		
4.0	Wharehuanui Study Area	8
5.0	Discussion	10
5.1	History	10
5.2	Cultural Landscape	10
5.3	Architectural Heritage	11
5.4	Tenure and Zoning	11
5.5	Geology	12
5.6	Hydrology	12
5.7	Ecology	12
5.8	Visibility	13
<b>Part 2: Character</b>		
6.0	Landscape Character	16
6.1	Mill Creek Catchment	17
6.2	Wharehuanui Hills	20
6.3	Speargrass Flats	22
<b>Part 3: Evaluation</b>		
7.0	Evaluation	28
8.0	Recommendations and Conclusions	42
<b>APPENDIX</b>		
A	Wharehuanui Study Area and Landscapes	
B	Landscape Units	
C	Tenure	
D	Existing Zoning	
E	Topography	
F	Hazards	
G	Surface Water	
H	Ecology	
I	Visibility	
J	Ability to Absorb Change	

## 1.0 Introduction

Population within the Queenstown Lakes District is projected to grow by 2.2 percent annually over the next 25 years.<sup>1</sup> Pressure to develop the District's resources will undoubtedly increase. Responding to these projections, the Queenstown Lakes District Council (QLDC) is currently undergoing a District Plan Review with the stated intent of delivering a more transparent and accessible District Plan which enables better integrated planning and better articulates a strategic direction for the District.<sup>2</sup>

The study in front of you was commissioned by Millbrook Country Club Limited (Millbrook) to better understand the specific and general landscape values of the surrounding landscape. This study identifies the qualities and values within a specific Study Area with particular regard to the landscape's biophysical, cultural and visual resources.

As part of the District Plan review, QLDC commissioned Read Landscapes to assess the landscape character of the Wakatipu Basin against its ability to absorb further change, with particular regard to the cumulative effects of development. Read's Landscape report focuses on the Wakatipu Basin comprehensively while the information contained within The Wharehuanui Landscape Study provides survey, analysis and recommendations for a smaller area within the Wakatipu Basin.

<sup>1</sup> Statistics New Zealand [http://www.stats.govt.nz/browse\\_for\\_stats/population/estimates\\_and\\_projections/projections-overview/subnat-pop-proj.aspx](http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/projections-overview/subnat-pop-proj.aspx)

<sup>2</sup> QLDC Council, 17 April 2014 Report for Agenda Item.

Figure 1 : The Wakatipu Basin as viewed from Coronet Peak



The Study Area is dubbed the 'Wharehuanui'. This study area is part of the wider Wakatipu Basin and generally contains the lands north of Lake Hayes, east of Hunters Road south of the slopes of Coronet Peak and west of Arrowtown.

The Wharehuanui area embodies many of the values that make the Wakatipu Basin a desirable place to live and visit. These values include access to open areas which offer broad views to distant and dramatic mountains. Elements within this area that embody the values of the Wakatipu include the presence of grazing animals within open pastoral lands, mature rows and patches of exotic trees, rural character buildings and landforms that display glacial formative processes.

Development of the Wakatipu Basin needs to be strategic, directed and specific to protect the values that give the District landscape resource its unique character. This study dissects the Study Area in terms of character and provides recommendations on how the landscape can best be managed so future development will not degrade and may enhance the landscape's values and quality.

## 2.0 Executive Summary

Landscape is a resource. Progressive approaches to identifying and assessing this resource extend beyond the visual quality to include the biophysical and cultural values. As the Queenstown Lakes District is projected to steadily increase in population, the landscape, which is considered to be the District's most valuable resource, is experiencing pressure from residential development. QLDC is at present reviewing the District Plan and it is understood that the status quo assessment criteria for development will be amended to address the landscape more holistically.

This report assesses and evaluates a large portion of land within the Wakatipu Basin to identify the landscape's existing character and ability to absorb change. The Study Area takes in most of the land between Arrowtown, Hunter Road and Lake Hayes. This land is considered to contain three separate landscapes; the Mill Creek Catchment, the Wharehuanui Hills and the Speargrass Flats.

The line between the landscapes can often be obvious, such as the top of a ridge or base of a slope. Other times these landscapes can overlap as the land form, cover and/or use, gradually changes over distance.

The bulk of the Study Area contains a strong rural character, with mostly pastoral lands surrounding residential settlements which in turn reflect the rural character. The dramatic topographic features, such as the highest hills and escarpment faces embody a more natural character. Within the resort zones, pastures are often replaced by golfing activities which continue the openness of the landscape. Residential development is often set against slopes and within pockets where the visibility of the built form is best absorbed by the land form.

Continued change is anticipated within the Study Area and this study identifies areas in which the landscape can best absorb change. This study finds:

- The elevated plateaus near Mooney Road (the Wharehuanui Plateau) can visually contain development as viewed from most public places and has a high ability to absorb further appropriate change so long as it is sympathetic to the rural character.
- Further appropriate development can also be contained within the elevated foothills adjacent to the ONL slopes.
- Escarpment faces often offer a high level of visual absorption capacity and appropriate development can occur at the base of several escarpments. However the quality of some escarpments, especially those in the Speargrass Valley can be adversely effected by inappropriate development.
- The hummocks and plateaus west of Millbrook have been to date unaffected by residential development and have capacity to absorb some appropriate development.
- Much of the land south of Arrowtown along the Arrowtown – Lake Hayes Road is near its threshold to absorb change. Appropriate development within much of this land including the land north of Speargrass Flat Road should be discrete.
- Several areas are found to have a low ability to absorb change. These include the escarpment faces and hill slopes as well as an area of open space which breaks the spread of development between the Lake Hayes residential areas and Arrowtown.

The Wharehuanui Area has a high level of amenity, including historical, ecological and visual values. While this amenity translates to a desirable place to live, an increase in residential activity has the potential to diminish the landscape character and quality. Maintaining the value of the landscape resource requires a strategic, directed and holistic approach. This study provides a base understanding of these values and an evaluation of how and where change could occur.

## 3.0 Methodology

This report follows the assessment guidelines set out by The RMA Quality Planning Resource (RMA-QPR) for 'Area-based' landscape studies. The RMA-QPR is a website where content is contributed by a partnership of interested professional organisations. The Ministry of the Environment owns and funds the website while the New Zealand Planning Institute is responsible for the site's administration.

The RMA-QPR guidelines breaks the assessment of a landscape resource into the following three components:

- Landscape Description/Inventory,
- Landscape Characterisation,
- Landscape Evaluation.

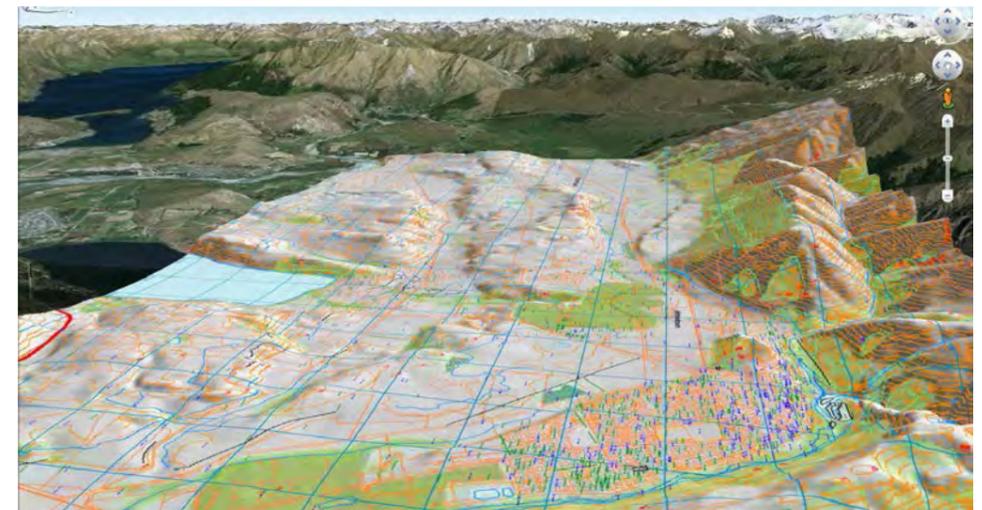
The landscape description and inventory is a research component which collects existing data of biophysical and cultural layers. These layers include physical attributes such as geology and ecology as well and cultural attributes such as history, zoning and existing and consented development.

Initial data was collected for the study through repeated site visits and desktop analysis using Quickmaps, Google Earth, and QLDC Webmaps. Once a Study Area was identified other professional consultants were engaged. Ecological data was provided by the Davis Consulting Group. Royden Thomson provided geological information. John Edmonds and Associates provided planning advice. Heritage consultation was provided by Jackie Gillies & Associates. This information was collated and formed the base on which landscape characterization and evaluations studies could occur.

An analysis of the landscape's character follows the Description and Inventory stage. The Wharehuanui was determined to contain three landscapes which display different characteristics. Each of these landscapes were then broken up further into smaller landscape units. The qualities that make these more manageable units was assessed. This assessment formed the basis for discussion on each landscape's land form, land cover and land use.

Following on from the landscape characterisation study, each landscape unit was evaluated. This evaluation included identifying the issues and opportunities of each unit, potential landscape management strategies and an assessment of the lands ability to absorb change. The end result of this evaluations is graphically represented through a series of tables, plans and photos.

Figure 2: Initial desktop studies of the area using Quickmaps and Google Earth.





Part 1

# Description and Inventory

## 4.0 Wharehuanui Study Area

The Wharehuanui Study Area is considered to be the area of land north of Slope Hill and Lake Hayes and south of the Coronet Peak Mountains and Arrowtown. The name 'Wharehuanui' appears on topographic maps within the Study Area and the name has been adopted for the whole of the Study Area.

Several site visits were undertaken to determine the boundaries between the landscapes of this area. The Wharehuanui is considered to be composed of three landscapes which are defined by physical boundaries such as topography, vegetation and human made features such as Arrowtown's urban edge.

This Study Area comprises several unique landscape features but does not contain any of the Outstanding Natural Landscapes (ONL) or Features of the District including the lakes, rivers or mountains. The Study Area encompasses the elevated hummocky lands that contain the Mooney Road area and the steep topography that exists on this feature's escarpments. The bulk of the Study Area is currently in pastoral or residential land use and contains all of the existing Millbrook Resort.

The line between landscapes is not always obvious. The values that make each landscape distinct can overlap for some distance.<sup>3</sup> The Study Area's boundaries were determined through repeated site visits and assessment of the particular landscape qualities, be they visual or experiential.

**Where a line is drawn on a map, it is accepted that the line is subject to interpretation and that often the exact boundary between landscapes can be obscure.**

<sup>3</sup> <http://www.qualityplanning.org.nz/index.php/planning-tools/land/landscape/landscape-assessment>

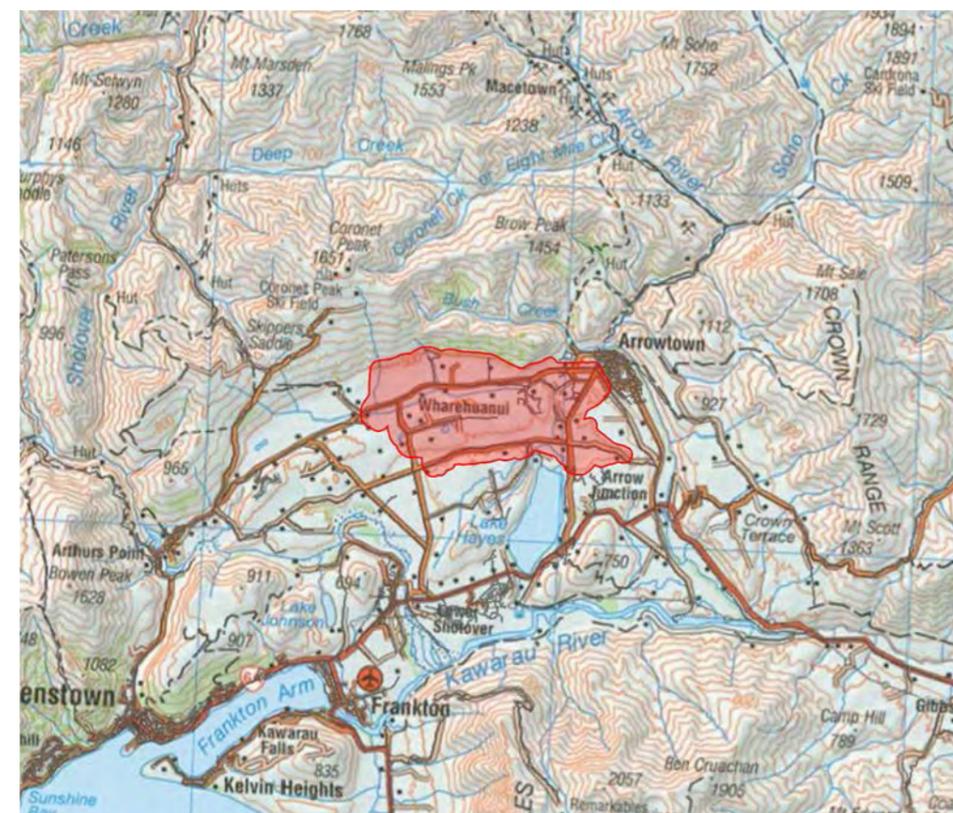


Figure 4: Location Plan - Scale - 1:100,000 @ A3

Figure 3: Aerial looking west across the Speargrass flats from above Hogs Gully.



**The Eastern Boundary:** To the east is the urban edge of Arrowtown. This urban landscape meets a rise in the land which runs perpendicular to McDonnell Road. This rise visually separates the land to the east from the land to the west and crosses The Hills Golf Course. The land east of this rise is considered to be more associated with the McDonnell Road area. The Study Area boundary generally follows the westernmost contour of this rise as it continues away from Arrowtown to the south into the area known as Hogans Gully.

**The Southern Boundary:** To the south an escarpment separates the Hogans Gully area from the upper terrace landscape of the Bendemeer Hills. This escarpment eventually meets the edge of Lake Hayes near the junction of Speargrass Flat Road and the Arrowtown – Lake Hayes Road. The level of domestication that has occurred north of Lake Hayes includes swathes of mature vegetation which visually separates the Study Area from the beaches and park-like lands which are directly associated with Lake Hayes.

Continuing west along Speargrass Flats Road the Study Area takes in the Speargrass north facing escarpment. Eventually the Study Area's boundary overlaps with the Hawthorn area to the southwest.

**The Western Boundary:** The Study Area takes in the western slopes of the hills running adjacent to Hunter Road. This landscape overlaps with the adjoining landscapes but Hunter Road and the watercourse that runs to the west of the road provide a logical separation of landscapes.

As the hills succeed to the flatter lands towards Malaghans Road and Millers Flat, the experiential qualities of the landscape best defines its boundaries. As users of Malaghans Road round a bend near Coronet Peak Station Road, they begin to experience a change in landscape character.

**The Northern Boundary:** To the north are the ONL slopes leading down from Coronet Peak. The base of these slopes clearly indicates a change in landscapes.

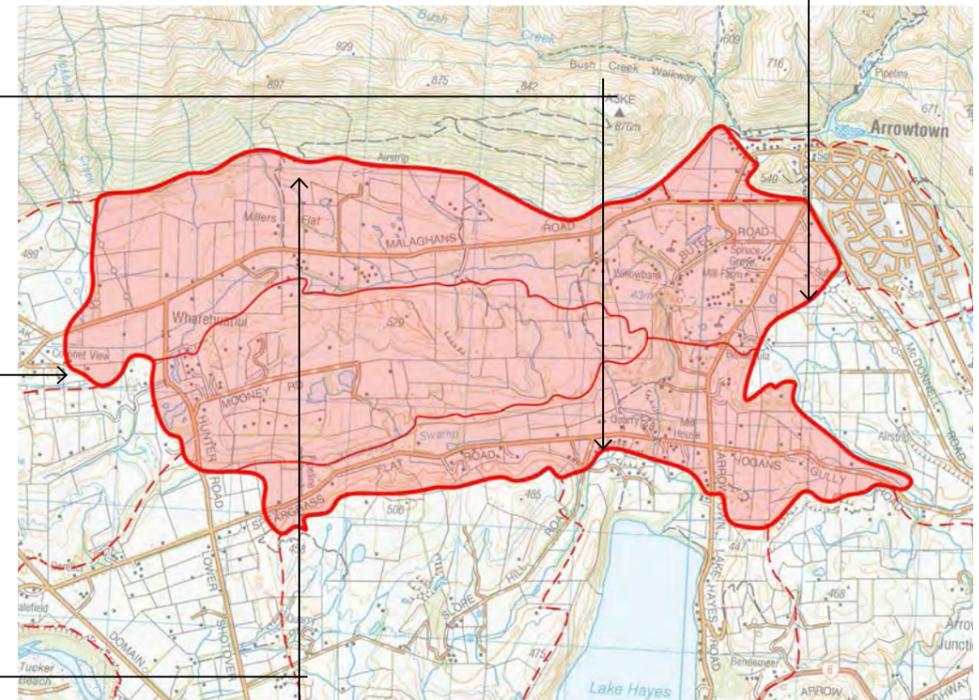


Figure 5: The Study Area and surrounding landscape.

## 5.0 Discussion

### 5.1 History

#### Pre-human

The Wakatipu Glacier originated from the western Southern Alps and at one point extended to the east to Nevis Bluff and to the south to near present day Athol. This glacier and associated geologic activity is largely responsible for the landforms that shape the Wakatipu Basin including its roche moutonnée features, kettle lakes, terraces and moraines.

As the glacier retreated the deposited moraine began to build with vegetation. There is evidence that at one time beech and broadleaf/podocarp forests may have covered most of the basin. Large fires burnt throughout New Zealand around 1200 AD and the closed forest that once cloaked 85-90% of New Zealand deteriorated.

It is understood that at the time the first European Settlers arrived in the Wakatipu Basin, much of the basin was covered in a diverse mix of grey scrub-land vegetation on the hill slopes with grasslands on the flooded river terraces and frost prone valley floors. Patches of remnant beech forests continue to thrive in pockets and gullies.

*'Finding the journey difficult, encountering the various natural hazards of Central Otago – speargrass, wild spaniard, and matagouri tore their pant legs to shreds and filled their boots with blood. ...Eventually to their delight they discovered what Rees described as 'The magnificent panorama of open country. Not perfectly level but broken by small hills and terraces, whilst a large lake stretched away in the distance as far as the eye could see.'*

- Wakatipu - William Rees and Von Tunzlemann 1860

#### Tangata Whenua

Evidence of Ngatimamoe settlement has been found throughout the District. These people would have traveled between the Wakatipu and surrounding areas in search of food and greenstone. Access between the Wakatipu and other areas would have been along the river corridors of the Kawarau, Mataura, Greenstone and Mararoa. The Ngatimamoe abandoned the area in the 18th century.

The origin of the name Wharehuanui is unknown. However the Maori word can be dissected as whare-huanui or house-path.

#### Settlement

The first recorded Europeans to visit the Wakatipu were Nathaniel Chalmers who arrived in 1853. However the first to settle the area were William Gilbert Rees and Nicholas Von Tunzlemann who arrived in early 1860. These men established sheep stations on the lands surrounding the lake. Rees's homestead was established near what is present day Queenstown.

Gold was discovered in 1862 in the Shotover River and the region quickly grew in population which in turn established a community. As the gold boom settled the Wakatipu's ability to support agriculture began to be exploited and flour mills were established, most relevant to this report, Peter and John Butel established a flour Mill on the land currently occupied by Millbrook Resort.

## 5.2 Cultural Landscape

During the first century of settlement in the Wakatipu, much of the native vegetation was stripped and/or burnt in favour of establishing agricultural activities. The agriculturalists, especially pastoral farmers brought with them traditional European farming techniques. The landscape quickly changed from its more natural state into a mostly pastoral landscape.

Large stretches of open lands became covered in exotic pasture grasses. Shelter belts of large exotic trees and swathes amenity trees were planted. This settlement vegetation continues to thrive in the Wakatipu and several trees and lines of trees are protected.

Many of the roads established during the last century continue to be used. These roads historically linked the established towns of Queenstown and Arrowtown with Cromwell and Wanaka.

Historical homesteads, farm sheds, cottages and other rural character structures such as walls form part of the cultural heritage of the landscape.

These elements combine to create a cultural landscape that dominates over the more natural underlying character.

*'Scenery is not scenery – it is "country" – if it is good for sheep it is beautiful, magnificent and all the rest of it; if not, it is not worth looking at.'*

-Samuel Butel

Figure 6: Speargrass Valley as it was in 1954 (Whites Aviation).



### 5.3 Architectural Heritage

Several heritage listed buildings exist within the study area. Most notably the buildings within the Millbrook Resort Village associated with the Butel family settlement and buildings on the Speargrass Flats associated with the Patterson family settlement. These buildings exhibit many of the forms and details which are typical of their era including small windows, massive stone wall and corrugated iron roofs.

In the vicinity of the heritage buildings are large mature trees. These trees include poplars, sequoias, elms, ash, oaks and walnuts. These trees are arranged as shelterbelts, avenue trees and feature trees. Some of the oldest trees in the District existing near these heritage buildings. It is understood that many of the trees, especially the poplars may be nearing an age where they are risk of being felled by high winds.

### 5.4 Tenure and Zoning (refer to Appendix C and D)

Aside from roads a Council owned sports field at Millbrook corner and some of the land adjacent to Mill Creek as it passes through Speargrass Flat, the Wharehuanui Study Area is almost exclusively held in private ownership. The cadastral pattern (showing lot boundaries) can be seen in several of the Appendices to this study. Larger lots outside of the resorts tend to be farmed, although rarely intensively. Mid-sized lots are often associated with peri-urban 'lifestyle properties'. The smallest lots are mostly in the residential enclaves within the Millbrook Resort.

The zoning map in Appendix D shows that the western half of the Study Area is covered by the Rural General Zone, where residential development is discretionary and is rigorously assessed against landscape criteria. A south eastern portion of the Study Area, to the north of Lake Hayes, is covered by the Rural Residential and Rural Lifestyle Zones, where rural-residential development to certain densities is anticipated. To the north east the Resort Zone has enabled golf course development intermingled with residential housing on relatively small lots within Millbrook. Waterfall Park also sits within the Resort Zone, but to date has not been developed.

Appendix C shows those distribution of existing houses and Rural Building Platforms consented in the Rural Zones. Rural Building Platforms are a prelude to development of houses. Once Rural Building Platforms are approved via resource consent, there are normally various consent conditions that need to be implemented. When Council is satisfied that those conditions have been given effect to, the Rural Building Platform is usually registered on the title and often reflected in the subdivision pattern. Once registered they reflect an ongoing right to develop.

When considering what additional development may appropriately be built in the Wharehuanui Resource Area, it is appropriate to assess:

- Existing development;
- further realistic development that can certainly occur under existing zoning; and
- approved Rural Building Platforms.

Figure 7: An avenue of trees leading to the Patterson Homestead on Ayrburn Farm.



## 5.5 Geology (refer to Appendix E and F)

Geologically speaking the Wharehuanui is part of a glacially sculpted valley and ridge complex west of Arrowtown. It consists of two valleys bisected by steep banks which lead up to elevated plateaus. The floodplain valleys are in part mantled by alluvial fans constructed by ephemeral tributary streams leading in to the valleys from the slopes of Coronet Peak and the associated central plateau referred to in this report as the Wharehuanui Hills.

The Study Area is composed of schist outcrops, glacial till, river alluvium, stream fans and flood plains.

The Mill Creek Catchment and its associated floodplains exist in the northern portions of the Study Area. This is a permanent stream with identified flood potential. Schist outcrops separate the central plateau from the Mill Creek Catchment. The plateau itself is composed of schist basement rock with a prominent cover deposit of glacial till. The south facing slopes leading down from the Wharehuanui Hills are similar in geologic form to the Plateau itself and gradually descend to the Speargrass Flats.

The Speargrass Flats are again, a floodplain dominated valley floors, however smaller in scale than the Mill Creek Catchment.

Several geologic hazards have been identified in the areas. These hazards are shown in the Geologic Hazards map in *Appendix F*.

## 5.6 Hydrology (refer to Appendix G)

Several surface waters exist within the Study Area (Appendix G). The most prominent is Mill Creek which drains a large catchment between the Wharehuanui Hills and the slopes of Coronet Peak. Several tributaries drain into this catchment, some spring fed.

Atop the Wharehuanui Plateau the wetland areas have been enhanced to create several amenity ponds within rural lifestyle blocks.

Also of particular note, the Arrow Irrigation Scheme passes through the area. This irrigation scheme diverts water from the upper Arrow River to properties across the Wakatipu Basin. The scheme enters the subject area as a surface water trench and is pumped up the north facing escarpment through a pipe. Once atop the plateau the scheme is channeled again as surface water before it meets the south facing escarpment that drops down to Speargrass Flat. The scheme is pumped across Speargrass Flat and again becomes surface water once atop the Slope Hill landscape.

## 5.7 Ecology (refer to Appendix H)

Pasture grass is the predominate vegetation cover of the Study Area and forms the overall texture and colour of much of the landscape. Large patches of exotic hardwood forest including sycamore, willows, larch, firs, gums and pines pepper the landscape in the form of shelterbelts and amenity trees.

A large forestry block exists to the north of the site and the encroachment of these wilding conifers onto adjoining properties is evident. Willows line much of the Mill Creek riparian areas. A large patch of mature exotics lines the southern flanks of Malaghans Road within the Rural Resort area. The Waterfall Park area hosts a dense, diverse mix of mostly mature exotic and native plants.

Dense scrub-land is also present within the Study Area. While some of this scrub-land contains native grey scrub-land species, these patches have in many cases been inundated with invasive briar, gorse and broom. Native bracken fern exists in small isolated patches.

The bulk of indigenous vegetation within the Study Area exists as amenity plantings within private properties. Evidence of struggling indigenous vegetation exists in some of the gullies, mostly those on the slopes that descend from the Wharehuanui Plateau towards Speargrass Flat.

Figure 9: Mill Creek as it passes through Millbrook Resort.



Figure 8: A distinct geologic feature near Malaghans Road.



## 5.8 Visibility (refer to Appendix I)

The Study Area is surrounded by more dramatic landforms including Slope Hill, Morven Hill, Cornet Peak, the Crown Terrace and Crown Range. Much of the Study Area is visible from these elevated lands.

As the Wharehuanui Study Area is visible from much of the surrounding Wakatipu Basin, for the purpose of this study five places have been identified as key points from outside the area where the Wharehuanui can be viewed. They are:

- The Lake Hayes Pavilion
- Entrance to the Lake Hayes recreation area from the Lake Hayes – Arrowtown Road
- The summit of Feeley Hill
- Cotter Road – Arrowtown
- Cornet Peak Base Building.

**The Lake Hayes Pavilion (Fig 10)** is approximately 3.5km in distance from the southern edge of the Wharehuanui area. Lake Hayes itself forms the foreground of this northerly view while the Rural Residential - North Lake Hayes Zone is visible in the mid-ground. Behind this area, the slopes leading up the Wharehuanui Hills and Rural Resort are moderately visible before the ONL slopes dominate the background.

**The entrance to the Lake Hayes recreation area (Fig 11)** is approximately 800m from the southern edge of the Wharehuanui. From here the Upper Hills are visible as are much of the Speargrass South Facing Escarpment and the edge of the Rural Resort area. Much of the Speargrass Valley is obscured from view by mature vegetation.

**Feeley Hill (Fig 12)** is immediately north of the Wharehuanui area and is considered to be an ONL. From the summit of Feeley Hill much of the study area is visible including most of the Mill Creek Catchment, portions of the Wharehuanui Hills and limited parts of the Speargrass Flats.

**Cotter Ave (Fig 13)** is a residential street atop a terrace in Arrowtown. Much of the rise that separates the Mill Creek Catchment from the McDonnell Road area is heavily vegetated and this vegetation obscures views into much of the Study Area. Small portion of the Mill Creek Catchment are visible as are the uppermost portions of the Wharehuanui Hills

**Coronet Peak Base Building (Fig 14)** offers views across most of the Wakatipu Basin, ranging from Gorge Road to the far eastern edge of the Wharehuanui. A ridge that separates the Base Building from the area known as Rocky Gully obscures views to the more northeasterly portions of the Wakatipu.

There are other, more distant places from which the Study Area can be viewed including the Remarkables Road, Tobins Track and the Crown Range Road. Any visual effects identified in the above five areas would be replicated to a lesser degree from these more elevated, distant locations. Similar to views from Coronet Peak the scope of wider visibility will render the Wharehuanui indistinguishable from the wider landscape pattern.

Figure 10: View north from near the Lake Hayes Pavilion.



Figure 11: View north from the entrance to the Lake Hayes recreation area.



Figure 12: View southwest from the summit of Feeley Hill.



Figure 13: View West from Cotter Ave.



Figure 14: View south from the Coronet Peak Base Building.





Part 2

# Character

## 6.0 Landscape Character

Landscape is most often associated with and characterised by its visual values. This emphasis on the visual is a remnant of the 'picturesque' aesthetic which originated in 15th century England. This aesthetic presents the landscape as something that should appear as a painting and be susceptible to the same analysis and critique. This dated interpretive response does not incorporate the ecological and emotion values of place which significantly contribute to the landscape's character

Progressive approaches to landscape characterisation originating from Europe provide an alternative to understanding and interpreting the values of landscapes. These approaches attempt to escape the emphasis on the visual and instead focus on the 'action or interaction of natural and/or human factors'.<sup>4</sup>

The Queenstown Lakes District Plan is (the Plan) is strongly rooted in the picturesque aesthetic. However the revaluation of the Plan presents an opportunity to adopt progressive approaches to understanding and assessing landscape character, beyond the visual. That is to say that the landscape is not only a visual resource, but also a biophysical and cultural resource.

The following *Landscape Character* portion of this report will reference the *Description and Inventory* section to inform the assessment of landscape character. The Wharehuanui Study Area composes a large area of land on which, after extensive site visits and studies, it is determined three landscapes exist within. For the purpose of this study these landscapes are called the:

- Mill Creek Catchment.
- Wharehuanui Hills.
- Speargrass Flats.

Each landscape has within it separate units which in turn have distinct landscape values, be they cultural or biophysical. By breaking the Study Area up into smaller landscape units and assessing the character of each unit it is possible to dissect the attributes that make each landscape distinct. The culmination of this information then paints a more informed picture of the landscape's character as a whole.

The following portion of this study will identify the landscape character elements within each landscape unit and assess the character of the landscapes as a whole. The RMA-QPR methodology suggests landscape character studies should break the assessment into three categories:

- Land Form
- Land Cover
- Land Use.

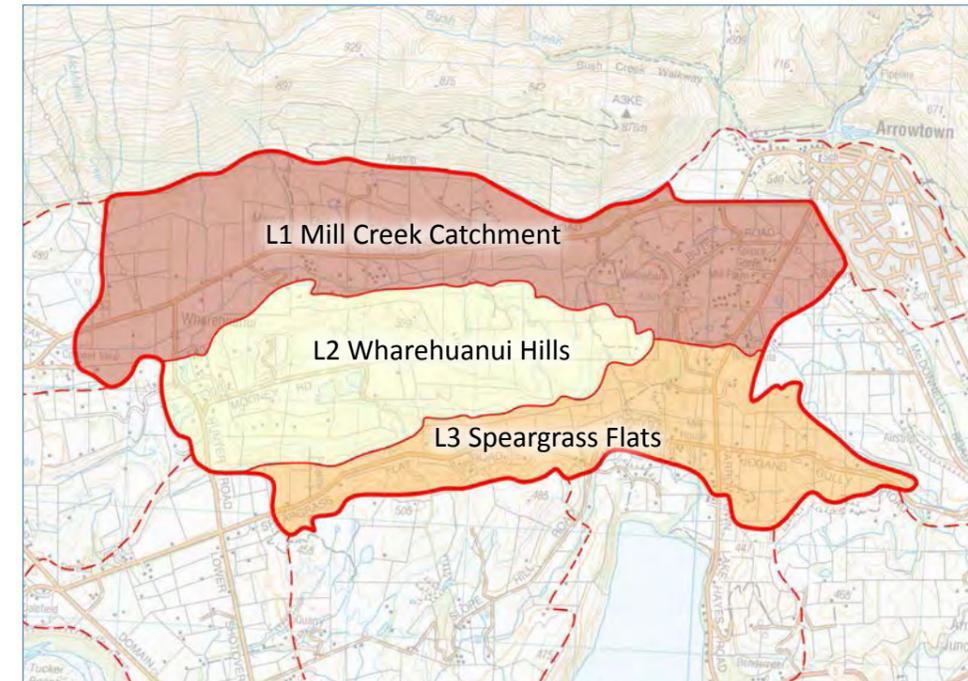


Figure 15: The three landscapes of the Study Area.

Figure 16: Table of landscapes and landscape units.

Wharehuanui Study Area		
Landscapes	U#	Landscape Units
Mill Creek Catchment	1	Millers Flat
	2	The Foothills
	3	Rural Resort
	4	Malaghans North Facing Escarpment
Wharehuanui Hills	5	Wharehuanui Plateau
	6	The Upper Hills
Speargrass Flats	7	Speargrass South Facing Escarpments
	8	Speargrass North Facing Escarpment
	9	West Speargrass Valley
	10	Waterfall Park
	11	East Speargrass Valley
	12	Lake Hayes Rural Residential
	13	Hogans Gully

<sup>4</sup> (<http://conventions.coe.int/Treaty/EN/Treaties/Html/176.htm>).



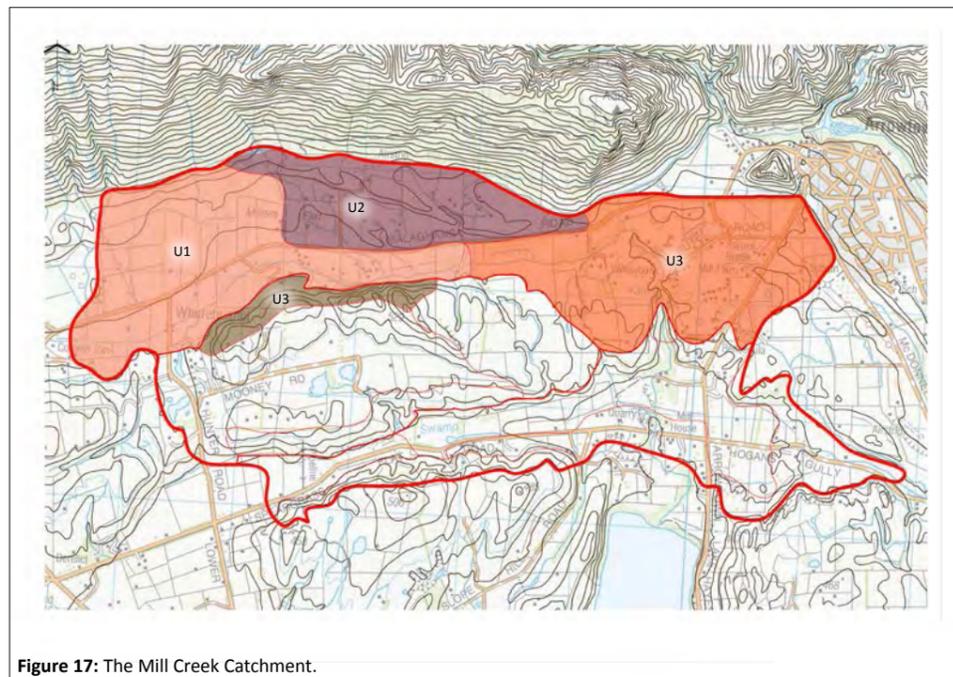


Figure 17: The Mill Creek Catchment.

### 6.1 Mill Creek Catchment

The Mill Creek Catchment is a landscape between the steep slopes of the ONL mountains and the upper parts of the Wharehuanui Hills. Malaghans Road runs through this mostly linear landscape linking the westerly Coronet Peak Amenity Area with the urban areas of Arrowtown. Mill Creek flows west to east through this landscape before diverting to the south and dropping down through Waterfall Park into the Speargrass Flats.

The Mill Creek Catchment is dominated mainly by the steep walls that enclose the otherwise relatively flat landscape. To the north these walls are defined by the vegetated ONL slopes. To the south the landscape's walls are defined by the often craggy escarpment that leads from the valley floor to the upper Wharehuanui Hills.

Aside from the escarpment faces, much of the Mill Creek Catchment is either rolling hummocky hills or flatland with the occasional variation of schist outcrops and river terraces.

There are considered to be four landscape units that make up the Mill Creek Catchment. They are:

- U1 Millers Flat
- U2 The Foothills
- U3 Rural Resort
- U4 Malaghans North Facing Escarpment

#### Land form

The Mill Creek catchment is predominately a floodplain flanked by steep sides. The headwaters of Mill Creek to the west flow into Millers Flat, which is so named for its moderate topography. It is not entirely flat and in fact descends gradually from the toe of Coronet Peak eastwards. To the north of Millers Flat the Malaghans North Facing Escarpment poignantly mark the edge of the Mill Creek Catchment. These escarpment faces are often craggy and steep with a distinct ridge and apex which falls back to the south to the Wharehuanui Plateau.

To the northeast of Millers Flat are The Foothills, a rolling hills landscape where plateaus and gullies exist between slopes and summits. To the north, this unit meets the steeper and more consistently graded ONL slopes. The Foothills extend to the east and south until meeting similar rolling hill features of the Rural Resort area.

The Rural Resort area is composed of floodplains and rolling hills between the Wharehuanui Hills and Arrowtown. Mill Creek passes through the Rural Resort area and the floodplains around that watercourse are generally flatter. Subtle terraces lead up to the south and west of Mill Creek and the topography gradually increases until the boundaries between the Wharehuanui Hills and Rural Resort areas overlap. The northern and eastern portions of the Rural Resort area are significantly flatter with one obvious schist intrusion adjacent to Malaghans Road and the ONL slopes.

#### Land cover

The Mill Creek Catchment, like most of the Wakatipu Basin is predominantly covered in pasture grasses. Within the Rural Resort area the mown grasses of golf surfaces compete with pasture grass as the predominant land cover.

The flat, pastoral lands of Millers Flat contain linear plantings of exotic trees which stretch across the landscape, generally running north-south and following cadastral boundaries and/or access-ways. A prominent band of mixed exotic trees exists to the south of Malaghans Road across much of the Rural Resort area. Along the margin of Mill Creek, willows are the prevalent vegetation interspersed with native grasses.

The steep slopes of the Malaghans North Facing Escarpment as well as the gullies that lead through the foothills host indigenous grey scrub-land species including kowhai, mingimingi and matgouri, which in many cases are being overrun by exotic weeds including hawthorn, briar and wilding conifers.

Other vegetation that exists within the Mill Creek Catchment includes amenity plantings of native and exotic species within the more residential portion of this landscape.

#### Land use

The Mill Creek Catchment is diverse in terms of its land uses which range between recreational, medium density residential and pastoral. The residential density and subsequent domestic character gradually increases from west to east and south to north towards Arrowtown. Three District Plan Zones cover the Mill Creek Catchment; the Rural General, Rural Residential and Resort zones.

The Miller Flat landscape unit is predominantly agricultural with large plots of productive lands covering most of the flatlands.

The Flight Park Café exists within The Foothill and allows commercial and independent paraglider and hang glider pilots to land on site.

Lands adjacent to Malaghans North Facing Escarpment support a higher density of residential activity as these faces allow development to be better visually absorbed.

Within the Rural Resort unit, development has occurred according to the Millbrook Structure Plan which designates land use and activities. The two dominant land uses within this Resort Zone area Golf/Open Space and Residential. Much of the residential development within the Rural Resort area has occurred in clusters surrounded by more open lands.





**U1 Millers Flat**

The western most portion of the Study Area is Millers Flat which exists adjacent to and is inextricably linked to the Coronet Peak Amenity Landscape to the west.

*Landscape Unit Character:*

Millers Flat is so named for its moderate topography set amongst more dramatic features. Millers Flat is mostly agricultural with large areas of open lands broken by the occasional shelterbelt. Residential dwellings are generally set back from roads and adjacent to the steeper faces which enclose the flats. The overall character of Millers Flat is pastoral with a linear pocket of a rural residential character near Mill Creek itself and the north facing escarpment.



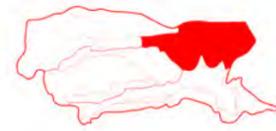
**U2 The Foothills**

The Foothills contain rolling hummocky hills, gullies and plateaus that lead to the steeper faces of the ONL slopes.

*Landscape Unit Character:*

The Foothills are a rolling hill landscape. They are distinctly separate from the ONL slopes and from the flatter lands to the west. While pasture grasses dominate much of The Foothills, patches of exotic weeds and grey scrub-land are present. Shelter belts are present but not as prevalent as they are within the adjoining lands. Parts of The Foothills contain residential activities, especially in the vicinity of Dennison Road. These residential activities also introduce a high level of amenity trees, including exotic and native plantings. A large agroforestry block forms The Foothill's northern edge.



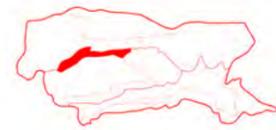


**U3 The Rural Resort Area:**

The Rural Resort area contains the more open lands south and west of the urban boundaries of Arrowtown. The Rural Resort areas is so called as it contains the Millbrook Resort and portions of the Hills Golf Course.

*Landscape Unit Character:*

The Rural Resort area maintains much of the surrounding landscape character in terms of openness and vegetation. However golf courses take the place of pastures and clusters of homes take the places of large homestead blocks. Residential density is higher within pockets of this unit. Mature exotic trees form the structure of the landscape and existing development has, to a large degree occurred within this structural planting.



**U4 Malaghans North Facing Escarpment:**

These craggy faces form the walls that separate the Mill Creek Catchment from the Wharehuanui Hills.

*Landscape Unit Character:*

Steep and craggy faces bookend the Mill Creek Catchment. The cragginess of the escarpment faces is not as pronounced throughout the landscape unit. The slopes that lead down to the valley floor adjacent to the cliff faces generally display a dense vegetation pattern of mostly exotic weeds intermixed with occasional grey scrub-land species. The escarpment faces form the backdrop to which much of the denser residential activities of Millers Flat are set.



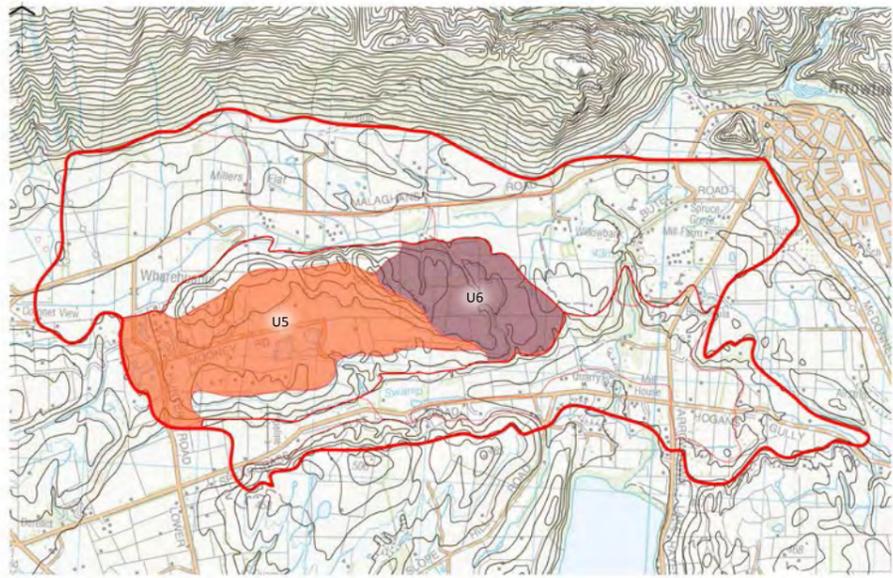


Figure 18: The Wharehuanui Hills

## 6.2 Wharehuanui Hills

The Wharehuanui Hills is a remnant moraine landscape similar to an esker land form. Steep, craggy escarpments define the north and south facing edge of this landscape. Atop it are plateaus and remnants of kettle lakes which have been enhanced to create large amenity ponds for private land owners. The more eastern part of this landscape rolls gently down across hummocks and plateaus to meet the flatter landscapes of the Mill Creek Catchment. The more western part of this landscape is sunk between the north and south facing escarpments.

The Wharehuanui Hills are considered to contain two landscape units. They are:

- U5 The Wharehuanui Plateau
- U6 The Upper Hills

### Land Form

The Upper Hills are part of a schist outcrop with deposited glacial till. The landscape is considered to be the area of land between the north and south facing slopes that lead down into the flatter landscapes of Speargrass Flat and the Mill Creek Catchment. Within the Wharehuanui Basin the land displays varying characteristics of hummocky hills intermixed with plateaus that sink into areas of surface water.

To the east of the Wharehuanui Basin, the Upper Hills rise more dramatically and create the high point of the Study Area (529m). These hummocks and plateaus continue to gently fall to the east and eventually overlap with the Rural Resort landscape unit.

### Land Cover

The Wharehuanui Hills are mostly covered in pasture grasses interrupted only by rare shelterbelts. Within the Wharehuanui Basin the vegetation cover is significantly more dense and diverse with substantial plantings in lifestyle blocks. These plantings include lineal plantings of exotic trees as shelter belts, patches of exotic trees with a park-like character and riparian plantings, often containing native species.

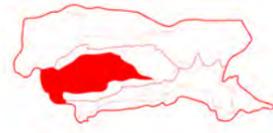
### Land Use

Rural Residential development has occurred on the large lifestyle sections across the Wharehuanui Plateau. This residential density is higher in the western portions of the plateau and the density thins to the east. Large lifestyle blocks extend across the more westerly lands. These lifestyle blocks still retain a level of productive use but in many ways this use is dominated by the more domestic amenity features within the landscape. Limited residential activity is present to the east of the uppermost hills.

Figure 19: A rural Lifestyle development within the Wharehuanui Plateaus.



## U5 The Wharehuanui Plateau



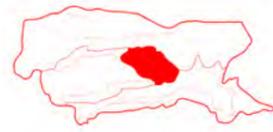
The Wharehuanui Basin exist on the elevate moraine terrace between Malaghans Road and Speargrass Flat Road. Malaghans North Facing Escarpment forms the northern boundary of this unit while the southerly boundary is defined by the Speargrass South Facing Escarpment. A high point on the hills separates the Wharehuanui Plateau from the Upper Hills landscape unit.

### *Landscape Unit Character:*

The Wharehuanui Plateau has a strong rural lifestyle character with generally large plots of land in agricultural use. Set within the rural character are generally large dwellings, farm buildings , amenity gardens and ponds. The wetlands of this area are remnant kettle lakes which have been enhanced and planted.



## U6 The Upper Hills:



The Upper Hills exist to the east of the Wharehuanui Plateau. They contain the highest point (529) to the elevated moraine between Speargrass Flat Road and Malaghans Road. The northern and eastern boundary of the Upper Hills and Rural Resort landscape units overlap.

### *Landscape Unit Character:*

Elevated pasture-lands exist within the Upper Hills landscape unit. The more westerly portions of the Upper Hills are characterised by rolling hills ascending to the upper plateaus. Shelterbelts follow cadastral boundaries while amenity trees, and patches of native scrub-land mixed with exotic weeds follow the slopes of the gullies. Limited residential activity has occurred on the Upper Hills.



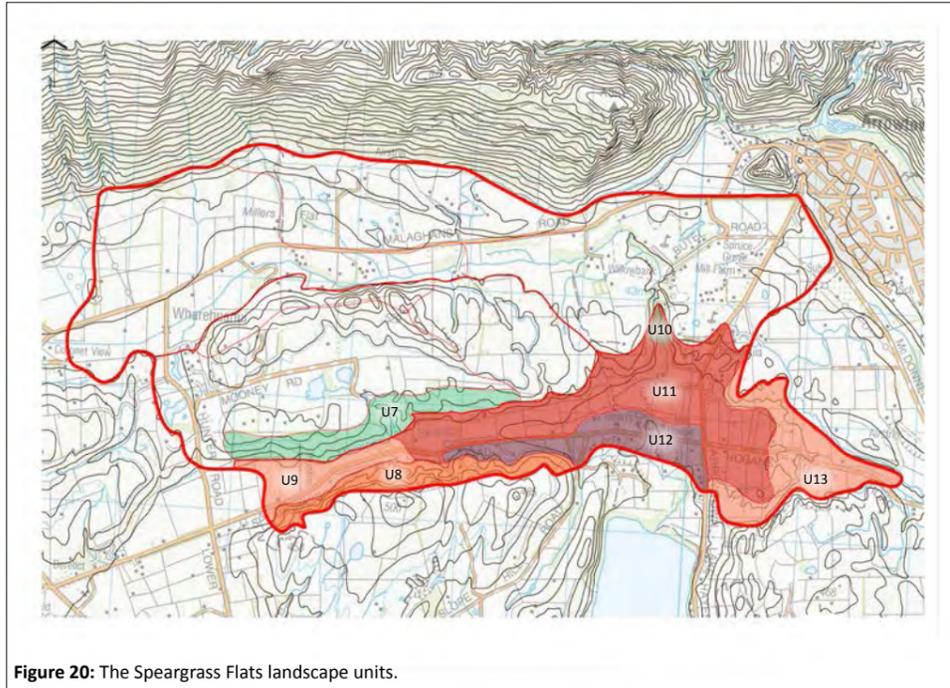


Figure 20: The Speargrass Flats landscape units.

### 6.3 Speargrass Flats

The Speargrass Flats landscape is located between the Wharehuanui Hills and Slope Hill/Lake Hayes landscapes. It is a mostly linear, corridor landscape. It is distinctly separate from the more elevated lands to the north and south. It is remotely connected to the Lake Hayes landscape however separated visually from the lake by existing development including buildings and plantings. The Speargrass Flat landscape extends past the Lake Hayes Arrowtown Road into the area known as Hogan’s Gully which is a similar corridor with steep sides.

The Speargrass Flats are considered to contain 7 landscape units. They are:

- U7 Mooney’s South Facing Escarpment
- U8 Mooney’s North Facing Escarpment
- U9 West Speargrass Valley
- U10 Waterfall Park
- U11 East Speargrass Valley
- U12 Lake Hayes Rural Residential Area
- U13 Hogans Gully.

Figure 21: View from the Bendemeer Hills looking west across the Speargrass Flats.



#### Land form

Floodplains, terraces and escarpments give form to the Speargrass Flats. Similar to the landscape unit of Malaghans North Facing Escarpment , Speargrass North Facing Escarpment displays steep craggy schist faces with distinct apexes. Speargrass’s South Facing Escarpment has a more gradual slope weaving in and out of rounded gully and spur features. Between and below these two escarpments is the West Speargrass Valley Mooney valley, a relatively flat, narrow valley that distinguishes the Speargrass Flats from the Hawthorn Landscape farther west.

The Speargrass Flats valleys, Hogans Gully and the Lake Hayes Rural Residential area all have similar characteristics in terms of form. Surface waters flow through the floodplains from the west, north and east. Mill Creek drops down dramatically from the Rural Resort through Waterfall park into the Speargrass Flats. Waterfall Park displays distinctly different character than the surrounding valleys with more dramatic relief.

#### Land Cover

Similar to the other landscapes in this Study Area, the predominant vegetation cover is pasture grass. Again, this cover is often broken by mature shelter belts of exotic trees and patches of mixed scrub-land in gullies. Amenity planting has taken place, most notably within the Lake Hayes Rural Residential Area. Here the density of trees, especially those to the south of Speargrass Flat Road create the boundary of the Study Area from the Lake Hayes Landscape.

Recent consent has been granted to much of the lands that occupy the Speargrass South Facing Escarpment for the planting of mixed exotic forests (Ayrburn Station). When mature, these plantings will significantly change the appearance of the land cover from pastoral to forested.

#### Land use

Much of the land within this landscape is zoned Rural General, although a finger of the Resort Zone extends into Waterfall Park and the Rural Residential - North Lake Hayes zone form as part of the landscape’s southern boundary.

Existing commercial activity within the Speargrass Flats landscape is limited to the Walnut Cottage Café and a few visitor accommodation units. Existing consents allows for further residential and commercial activities to occur within the Waterfall Park landscape unit.



### U7 Speargrass South Facing Escarpment

This escarpment forms the southern edge of the Wharehuanui Hills and northern edge of the Speargrass Flats.

#### Landscape Unit Character:

This escarpment face is generally less steep than the other escarpments in this Study Area. It is mostly pastoral in character with little sign of domestic activities. The slopes ascend gently towards the Wharehuanui Hills. Vegetation includes large and mature shelterbelts. Recently consented planting includes swathes of exotic amenity trees which in the near future will change the colour and texture of much of the south facing escarpment.



### U8 Speargrass North Facing Escarpment

This escarpment is significantly steeper than the south facing escarpment and forms a large portion of the southern boundary of the Speargrass Flat Landscape. The top of this landscape unit contains the Slope Hill landscape.

#### Landscape Unit Character:

Steep craggy schist faces break the otherwise moderately graded slopes of pasture grasses, mixed exotic and native vegetation. The topography and vegetation of this landscape unit provide a higher degree of naturalness than the surrounding landscape.



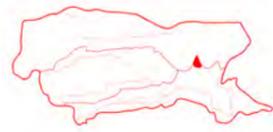


**U9 West Speargrass Valley**

This is a narrow valley between the escarpment faces. The West Speargrass Valley's boundaries overlap with the Lake Hayes Rural Residential and the East Speargrass Valley to the east and the Hawthorne Landscape to the west.

*Landscape Unit Character:*

The West Speargrass Valley is a corridor landscape. It is composed generally of the flatter lands between the north and south facing escarpments. The character of the West Speargrass Valley is inextricably linked to the escarpment faces. Vegetation patterns of open pastures, shelter belts and patches of rural amenity trees extend throughout. Some residential activity has occurred against the north facing escarpment.

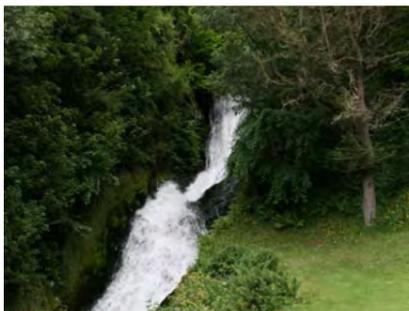


**U10 Waterfall Park:**

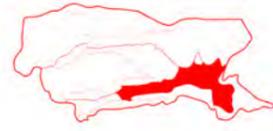
This is a small landscape unit. It's a densely vegetated park-like pocket of land dominated by a waterfall. This waterfall is part of Mill Creek and descends from the Rural Resort landscape unit into the Speargrass Flats.

*Landscape Unit Character:*

Waterfall Park is a pocket landscape unit defined by the dramatic relief that encloses the gorge. A water cascade descends down the escarpment face. Dense mature vegetation shrouds the gorge walls and provides a lush, vegetative character. The vegetation doesn't allow much sun into the gorge and the Waterfall Park landscape unit has a distinct micro-climate, somewhat tropical in summer months and colder and bleaker than the Basin floor in winter months. There is an existing Structure Plan which permits significant development within this unit.



**U11 East Speargrass Valley:**



This landscape unit forms much of the foreground to the Upper Hills and Rural Resort Areas. It consists predominantly of flat pastoral lands leading to the toe of the Wharehuanui Hills.

*Landscape Unit Character:*

The East Speargrass Valley is a mostly rural landscape unit existing in the foreground to the Rural Resort area. The level of residential activity within the East Speargrass Valley is higher than within the adjacent Hogans Gully unit and West Speargrass Valley. This more domestic character is a response to the landscape unit's adjacency to the more densely zoned residential activities of the Rural Residential - North Lake Hayes Area. While residential activities are present, this unit still maintains a high level of rural character.



**U12 The Lake Hayes Rural Residential Area:**

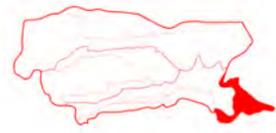


This landscape is located to the south of the more pastoral East Speargrass Valley. The Rural Residential Zoning continues to the shores of Lake Hayes. However the lands in this Zone, which are more associated to the open pastures are considered part of the Speargrass Flats Landscape while the lands to the south are considered to be part of the Lake Hayes Landscape.

*Landscape Unit Character:*

This landscape unit is the most domestic of all the units in the Study Area. The pastoral elements that surround this unit are generally void inside it. Instead this landscape unit hosts domestic activities set within the otherwise rural character. Vegetation within the Lake Hayes Rural Residential Area is more domestic. Patches of amenity trees are set amongst mown pastures. Avenue trees extend along sinuous driveways and access residential units. The density of residential development is higher here as a result of the Rural Residential zoning.





**U13 Hogans Gully:**

This landscape unit is composed of more elevated hills leading up to the east. These valleys are closely associated to the pastoral valleys below.

*Landscape Unit Character:*

Hogans Gully offers a high level of rural character with limited visible residential development. Mature trees extend across the lands as shelterbelts. The land is enclosed by terraces to the north and south and rolling pastoral hills descend from these terraces towards the Speargrass Flats. Portion of the terraces within Hogan Gully display a moderate level of naturalness. Residential activity occurs to the south against the escarpment face that leads up to the Bendemeer Hills.



CHARACTER



Part 3

# Evaluation

## 7.0 Evaluation

The previous sections of this study identified three landscapes within the Study Area and the smaller landscape units within them. Elements of each landscape unit was identified and their values in terms of land form, land cover and land use were defined. The boundaries between landscapes were found to often overlap. While the maps associated with this study clearly indicate a line between landscape units, it is often the case that landscapes are folded into each other and the boundaries between them can be obscure.

The following portion of this study summaries the character of each landscape unit identified in the previous section and evaluates it's resource potential. This evaluation determines:

- Areas in which appropriate development can occur without degrading the landscape.
- Areas in which inappropriate development may degrade the landscape.
- Effective ways to manage the landscape to ensure the existing values and quality are retained or enhanced.

For ease of reference, the findings of the character study is summarised in table format in terms of the landscape unit's:

- Visibility
- Land Form
- Land Cover
- Land Use.

Following on from this character summary, an evaluation and recommendations for each landscape unit is provided in terms of its:

- Ability to Absorb Change
- Development Issues and Opportunities
- Landscape Management Strategies.

### Ability to Absorb Change (refer to Appendix J)

The Wharehuanui Study Area is a rich landscape resource with a distinct quality and a high level of natural, cultural and visual values. The biophysical and cultural resources of the landscape are considered to bare an equal weight as the visual resource. However the ability for landscapes to absorb change is traditionally associated with the visual effects of change.

Visual absorption capacity can be defined as the landscape's ability to absorb physical changes without transformation in its visual character and quality.<sup>5</sup> This definition suggests that in order for a landscape to absorb development there should be no adverse change in the landscape's character or quality.

A scale which describes the landscape's ability to absorb change is useful in determining how and where development may occur. This evaluation uses the following scale and considers the ability of the landscape to absorb change **over and above what is existing and permitted.**

<sup>5</sup> Amir, S. and Gidalizon, E. 1988, Expert-based Method for the Evaluation of Visual Absorption Capacity of the Landscape.

Ability to Absorb Change:

- 1 **High** - Appropriate development will not adversely effect the landscape.
- 2 **Moderate to High** - Appropriate development may occur in areas where the landscape can best absorb it.
- 3 **Moderate** - Appropriate development should be strategic, managed and sympathetic to the landscape.
- 4 **Moderate to Low** - The landscape is near the threshold where further change may adversely effect it and change should be discrete.
- 5 **Low** - inappropriate change would adversely effect the landscape's character and quality

The higher the ability for a landscape to absorb change the more likely it is that development can occur without degrading the landscape's character and quality. The lower the landscape unit's ability to absorb change, the less likely it is that development can occur without adversely affecting the landscape unit's character and quality.

### Development Issues and Opportunities

Each landscape unit has its own distinct features which define it. These features often provide clues to how change can occur in ways which appropriately maintain the quality and character of the landscape. Whilst a landscape unit may have a low ability to absorb change, if change is approached in an appropriate, strategic and directed manner, its effects can be minimised and the landscape character and quality maintained, and in some cases, enhanced.

### Landscape Management Strategies

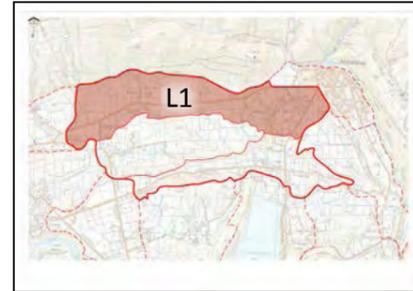
Management of the landscape is essential to the continuation of the landscape's quality and values. Within the District, management of lands has generally been left to the responsibility of private land owners, under the direction and supervision of the Council. An emphasis on the 'picturesque' aesthetic has elevated visual values at the expense of other landscape values, especially ecological. However as detailed int the Description and Inventory portion of this report, a progressive understanding of the landscape and it's values is slowly moving away from an emphasis on the visual and towards an understanding of the landscape as a holistic resource in its own right.

The landscape management strategies contained in this study this sub-heading examine strategies which not only preserve and enhance the landscape's visual values and quality, but also it's cultural, ecological and natural values.

Figure 22: An aerial view east across the Mill Creek Catchment and Speargrass Flats.



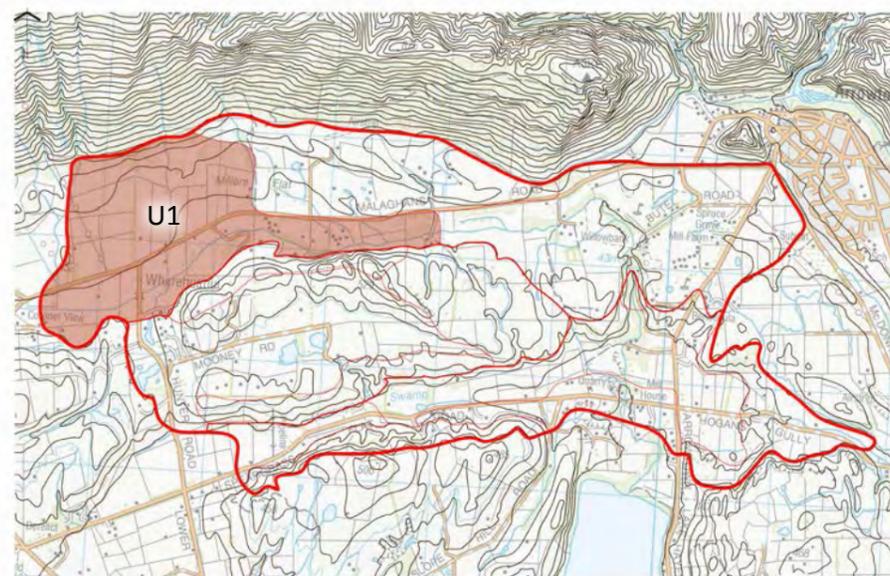
**L1 The Mill Creek Catchment**



**U1 Millers Flat Landscape Unit**



Figure 23: Near Hunter Road looking northeast across Millers Flat.

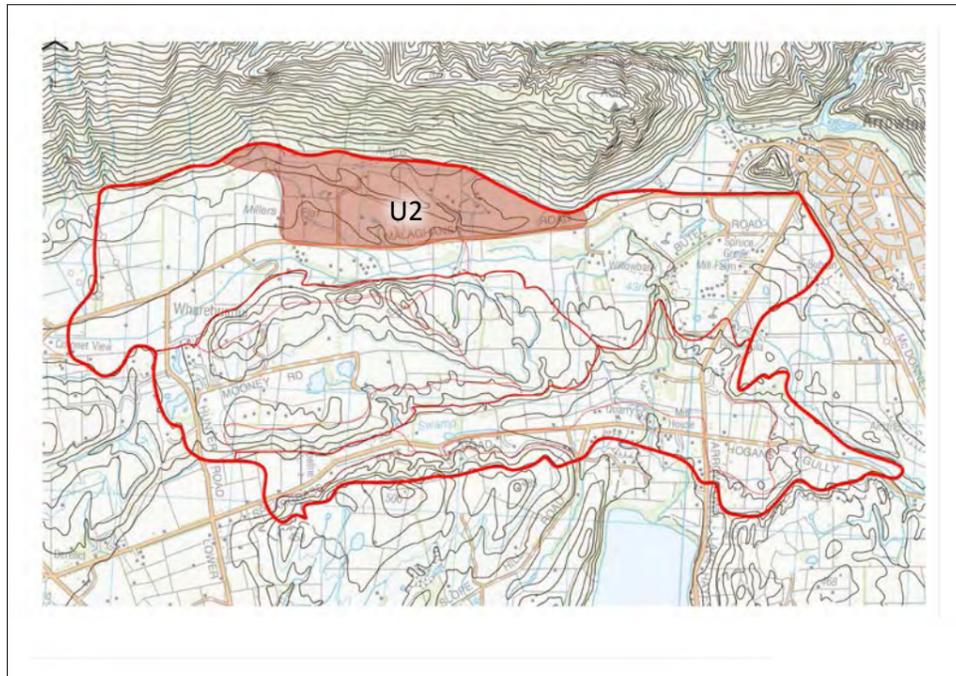


SUMMARY OF LANDSCAPE VALUES	MILLERS FLAT LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>Highly visible from portions of Malaghans Road and Hunter Road.</li> <li>Moderately visible from Coronet Peak due to distance.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>Generally flat.</li> <li>Mill Creek flows through the unit to the east.</li> <li>Steep topography marks the northern and southern edges.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>Mostly improved pasture grass.</li> <li>Shelterbelts, avenues and swathes of exotic and native plants.</li> <li>Rural character buildings and limited visible residential development.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>Pastoral farming.</li> <li>Low density residential.</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li><b>4 - Moderate to Low</b> potential to absorb development within the visible broader flatlands.</li> <li><b>3 - Moderate</b> potential to absorb further development at base of north facing escarpment.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>Strong rural character susceptible to degradation within the flatlands.</li> <li>Flat open land provides distinct views across them to the more dramatic mountains of the District.</li> <li>North facing escarpment allows development at it's base to be better absorbed.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>Development potential on the flat, open lands is limited and should be subject to the scale of open space retention.</li> <li>Planting which could impede views across the wider landscape should be restricted.</li> <li>Continued and accelerated management of wilding species.</li> </ul>

**U2 The Foothills Landscape Unit**



Figure 24: Near Malaghans Road looking north-northeast towards Flight Park.



SUMMARY OF LANDSCAPE VALUES	THE FOOTHILLS LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>The south facing slopes are highly visible from Malaghans Road.</li> <li>Upper portions of land have a very low level of visibility from other places within the basin.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>Rolling slopes extend towards the foot of ONL slopes.</li> <li>Plateaus exist atop The Foothills.</li> <li>Occasional gullies cut through The Foothills towards Malaghans Road.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>Mostly improved pasture grass.</li> <li>Dense patches of exotic trees.</li> <li>Native gray scrub-land species mixed with exotic weeds exists on some slopes and gullies.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>Pastoral farming.</li> <li>Rural living.</li> <li>Business (Flight Park).</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li><b>5 - Low</b> ability to absorb change on the south facing slopes, including the gullies have.</li> <li><b>2 - Moderate to High</b> ability to absorb further development, so long as it has a low visual impact on Malaghans Road or against ridges or skylines.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>A higher density of ecological planting could enhance the ecological values of the gullies.</li> <li>Exotic weed management is vital to the retention of open spaces.</li> <li>Residential density located within the visually isolated plateaus could increase without significant degradation to the landscape.</li> <li>Integrity of existing skylines and ridge-lines should be maintained.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>Continued productive use, especially on the south facing slopes.</li> <li>Ecological planting within the gullies and areas of existing native patches.</li> <li>Continued and accelerated management of wilding species.</li> </ul>

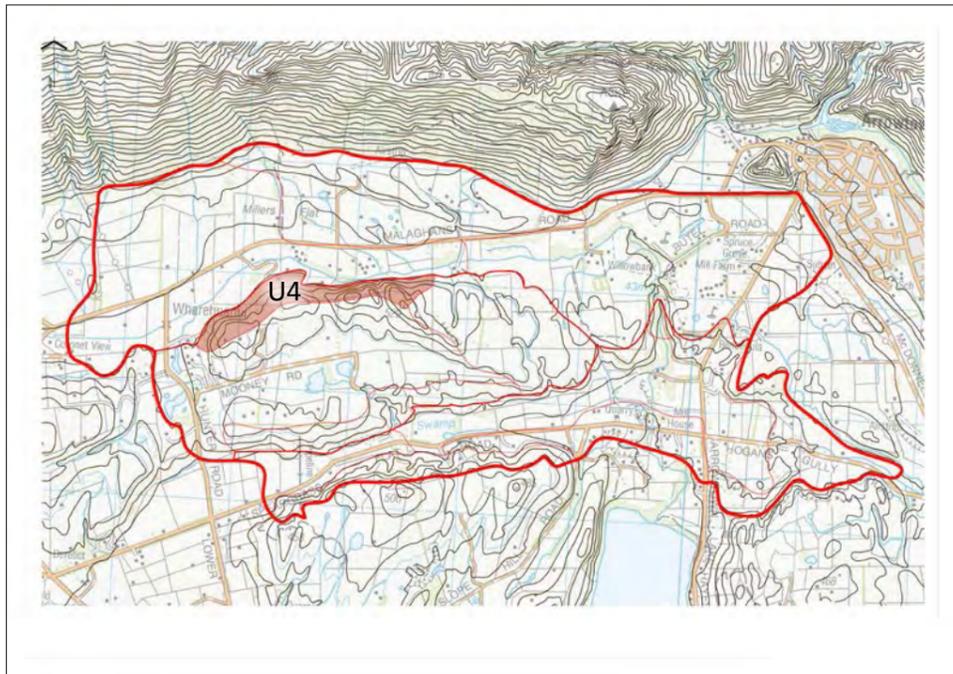
EVALUATION



**U4 Malaghans North Facing Escarpment Landscape Unit**



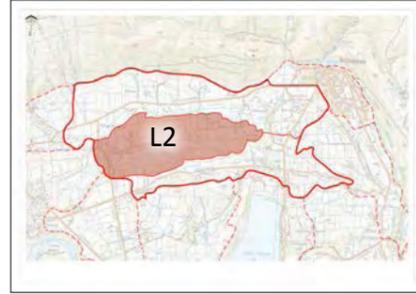
Figure 26: From Malaghans Road looking southeast.



SUMMARY OF LANDSCAPE VALUES	MALAGHANS NORTH FACING ESCARPMENT LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>Highly visible from Malaghans Road.</li> <li>Moderately visible from Coronet Peak.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>Schist walls form much of the dramatic slope that compose the north facing escarpment.</li> <li>Subtle gullies flow between the more dominant schist outcrops.</li> <li>Glacial till and alluvium mantels the stone outcrops.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>Small pockets of native and mixed exotic grey scrub-land.</li> <li>Exotic shrubs provide much of the structural vegetation, colour and texture on the escarpment.</li> <li>Unimproved pasture grass is the underlying vegetation.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>Limited pastoral farming.</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li><b>5 - Low</b> potential to absorb development on the escarpment face itself.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>The more natural character of these faces leave them susceptible to degradation.</li> <li>Pastoral farming is limited to portions of the escarpment faces.</li> <li>Integrity of existing skylines and ridge-lines should be maintained.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>Continued and accelerated management of wilding species.</li> <li>Nurture re-vegetation, especially within the gullies.</li> <li>Protection and enhancement of existing native vegetation.</li> </ul>

EVALUATION

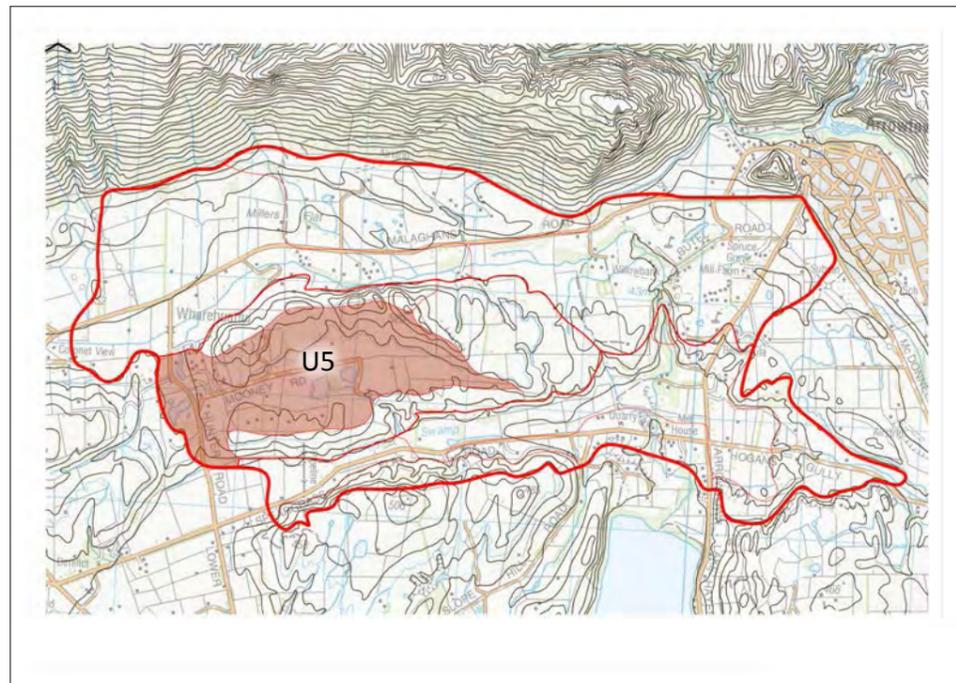
**L2 The Wharehuanui Hills**



**U5 The Wharehuanui Plateau Landscape Unit**



Figure 27: Near Mooney Road looking south across the Wharehuanui Plateau.



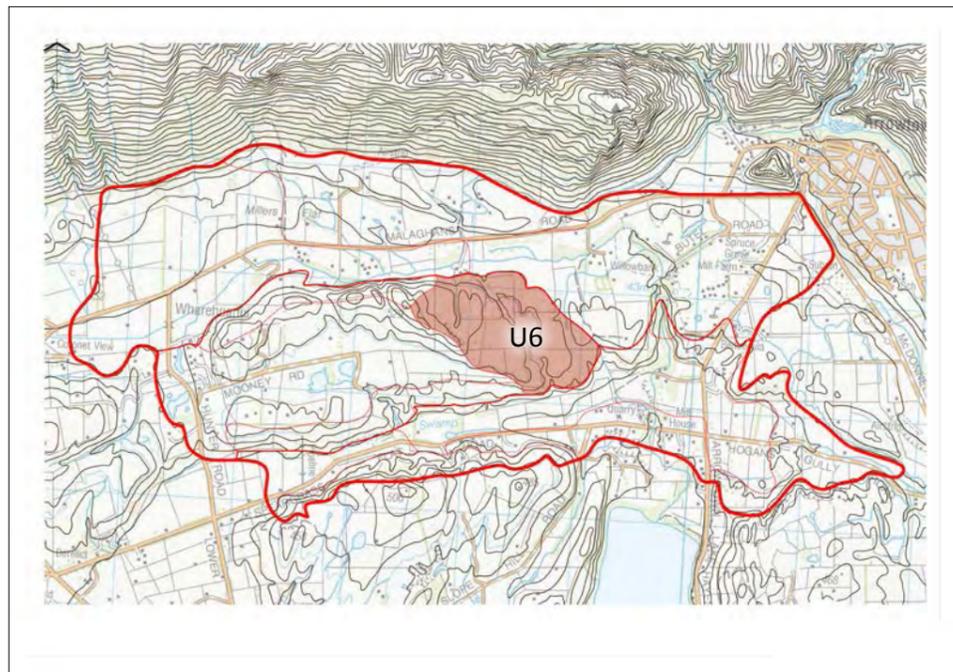
SUMMARY OF LANDSCAPE VALUES	Wharehuanui Plateau
Visibility	<ul style="list-style-type: none"> <li>Moderately visible from Coronet Peak</li> <li>The escarpment screens views into the Mooney Road valley.</li> <li>Only development in the vicinity of the upper escarpment faces is potentially visible from Malaghans Road, Speargrass Flat Road and Mooney Road.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>Schist bedrock lies underneath large deposits of glacial till.</li> <li>A reoccurring pattern of plateaus and hummocks occur throughout the unit.</li> <li>Naturally occurring and human-made wetlands exist on the floor of the Mooney Valley.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>Mown pasture grasses and surface waters are the primary cover.</li> <li>Dense patches of mature exotic trees pepper the landscape, more commonly in the lower western portions.</li> <li>Swathes of exotic and native plantings exist with the rural lifestyle properties ,especially prevalent along the edges of surface waters.</li> <li>Farm and residential buildings.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>Rural living.</li> <li>Pastoral farming.</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li><b>1 - High</b> ability to absorb further appropriate development on the lower portions of the Wharehuanui Plateau.</li> <li><b>3 - Moderate</b> potential to absorb further development on the more elevated portions of the unit.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>Avoid any adverse visual effects of development on the surrounding public roads, especially Malaghans Road and Speargrass Flat Road.</li> <li>Enhance ecological corridors on the margins of riparian areas.</li> <li>Residential development should maintain existing rural character.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>Rural residential living densities could increase in appropriate locations</li> <li>Existing rural elements should be repeated.</li> <li>Continued and accelerated management of wilding species.</li> </ul>



**U6 The Upper Hills Landscape Unit**



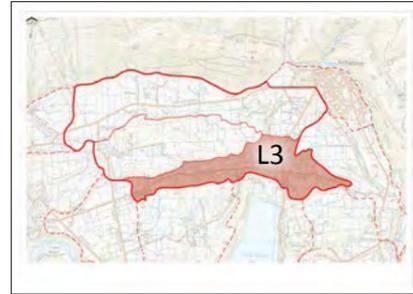
Figure 28: From within the Upper Hills looking northeast.



SUMMARY OF LANDSCAPE VALUES	THE UPPER HILLS LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>Moderate visibility from distant views such as Cotter Ave, Feeley Knoll and the entrance to the Lake Hayes recreation Area.</li> <li>Limited visibility from Malaghans Road and the Speargrass Flats.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>Upper rolling hills forming the apex of the Wharehuanui Hills.</li> <li>Higher more pronounced hill forms to the east of the unit.</li> <li>Plateaus and gullies exist between hummocky forms.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>Mown pasture grass is the dominant land cover.</li> <li>Patches of mature exotic shelter belt trees.</li> <li>Patches of rural amenity plantings.</li> <li>Bracken fern in localized patches.</li> <li>Limited farm buildings and dwellings.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>Pastoral farming.</li> <li>Rural residential.</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li><b>3 - Moderate</b> ability to absorb further appropriate development especially within the lower hills and plateaus.</li> <li><b>5 - Low</b> ability to absorb change on the uppermost hills and ridges.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>Development potential on the plateaus between hummocks.</li> <li>Integrity of existing skylines and ridge-lines should be maintained as viewed from public roads</li> <li>Retention of appropriate open space.</li> <li>Ecological plantings around waterways and gullies.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>Staged residential density from the Rural Resort Unit to the Upper Hills Unit.</li> <li>Retention of appropriate open space.</li> <li>Retention of rural character.</li> <li>Retention of prominent hummocky features.</li> </ul>

EVALUATION

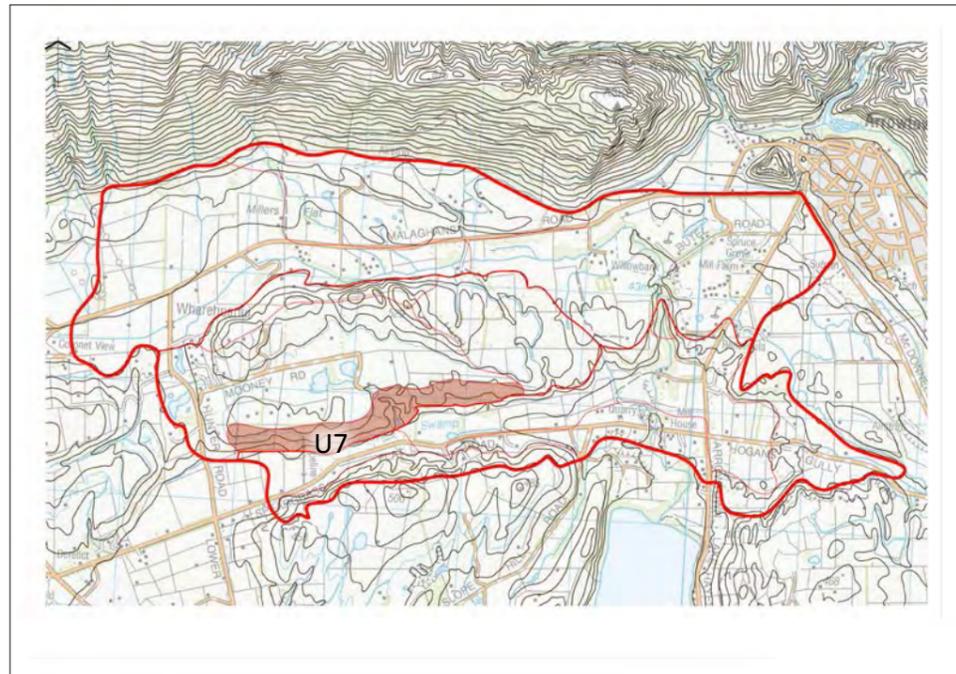
**L3 Speargrass Flats**



**U7 Speargrass South Facing Escarpment Landscape Unit**



Figure 29: From Speargrass Flat Road looking north towards the Speargrass South Facing Escarpment.

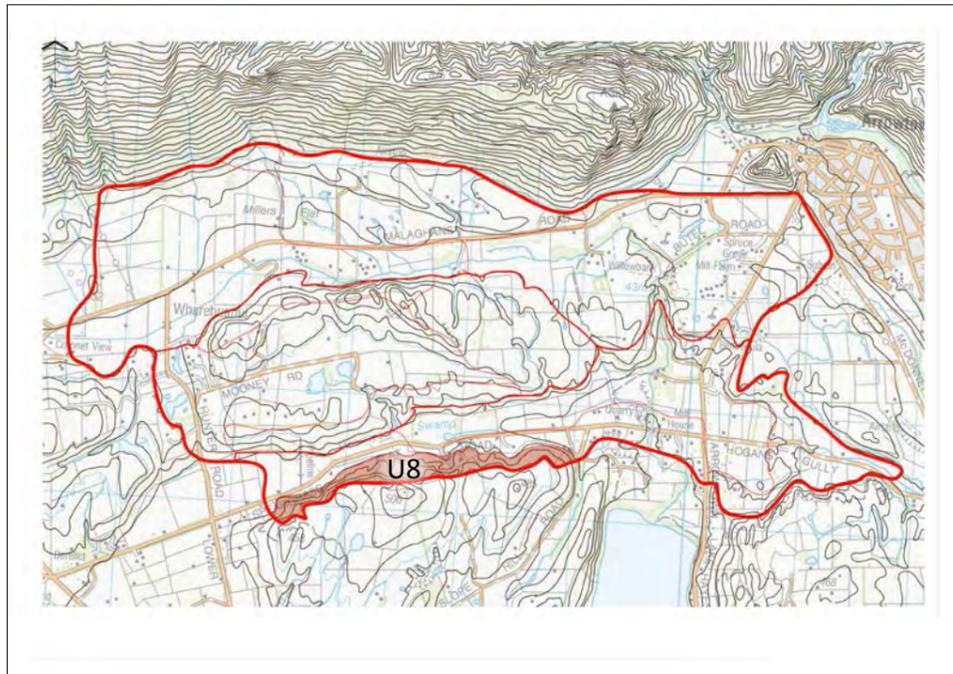


SUMMARY OF LANDSCAPE VALUES	SPEARGRASS SOUTH FACING ESCARPMENT LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>Highly visible from Speargrass Flat Road, Hunter Road and Lower Shotover Road.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>Rolling slopes and gullies leading up the Wharehuanui Hills.</li> <li>Landscape unit provides one wall of the Speargrass Valley corridor.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>Mostly improved pasture grass.</li> <li>Shelterbelts and avenues of exotic trees.</li> <li>Swathes of rural amenity trees.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>Pastoral farming.</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li><b>5 - Low</b> potential to absorb further development.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>Natural character can be strengthened especially in gullies.</li> <li>Only agricultural buildings would be appropriate for future development in most of this unit.</li> <li>Integrity of existing skylines and ridge-lines should be maintained.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>Continued productive use.</li> <li>Native planting within the gullies could enhance ecological values.</li> <li>Maintain open views by avoiding roadside planting.</li> </ul>

**U8 Speargrass North Facing Escarpment Landscape Unit**



Figure 30: Near Speargrass Flat Road looking southwest towards the north facing escarpment.



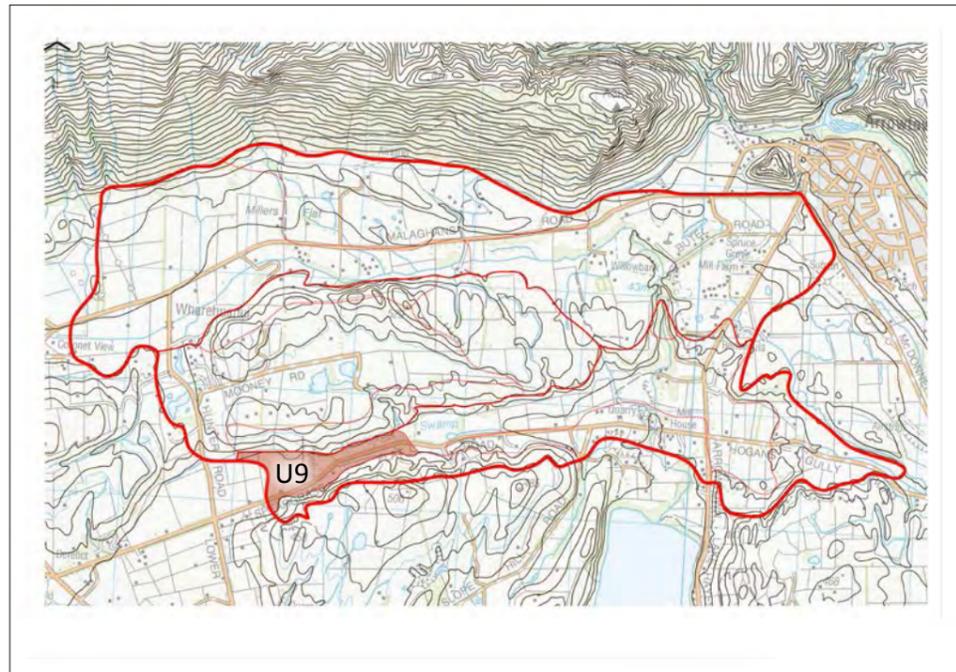
SUMMARY OF LANDSCAPE VALUES	SPEARGRASS NORTH FACING ESCARPMENT LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>Highly visible from Speargrass Flat Road, Hunter Road and Lower Shotover Road.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>Schist walls form much of the dramatic face that compose the north facing escarpment.</li> <li>Subtle gullies flow between the more dominant schist outcrops.</li> <li>Glacial till and alluvium mantels the stone outcrops.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>Unimproved pasture grass is the dominant land cover.</li> <li>Patches of exotic trees pepper the landscape.</li> <li>Some native grey scrub-land species are present.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>Infrastructural (Arrow Irrigation Scheme).</li> <li>Pastoral farming</li> <li>Rural Residential</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li><b>5 - Low</b> potential to absorb further development.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>Opportunities to enhance natural character.</li> <li>Ecological plantings around waterways.</li> <li>Integrity of existing skylines and ridge-lines should be maintained.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>Continued and accelerated management of wilding species.</li> <li>Re-vegetation especially within the gullies.</li> <li>Protection and enhancement of existing native vegetation.</li> </ul>

EVALUATION

**U9 West Speargrass Valley Landscape Unit**



Figure 31: Speargrass Flat Road looking west across the West Speargrass Valley.

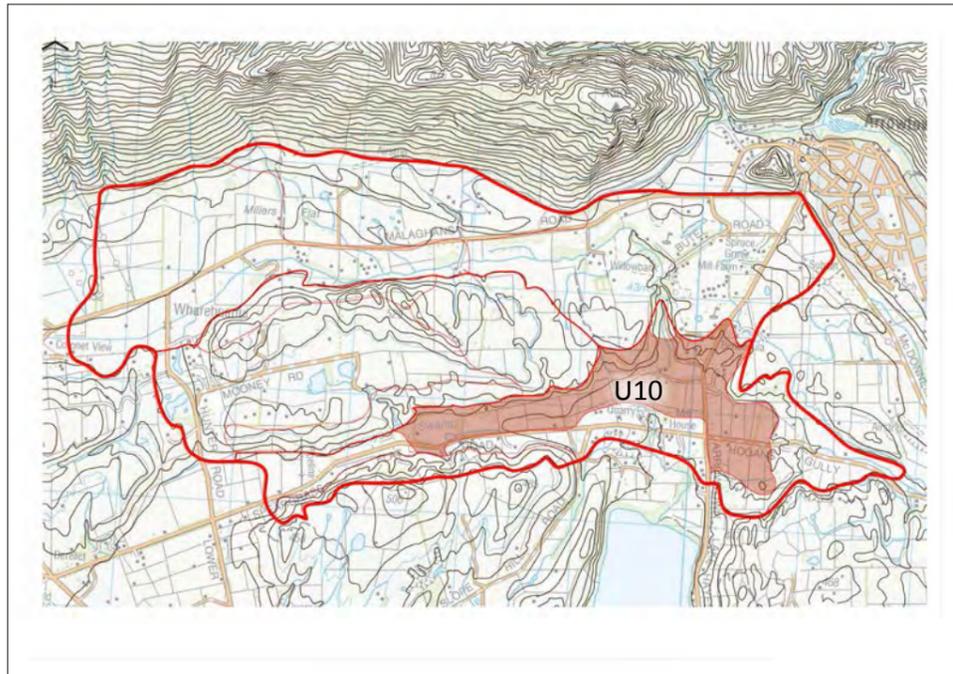


SUMMARY OF LANDSCAPE VALUES	WEST SPEARGRASS VALLEY LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>• Visibility is limited to Speargrass Flat Road due to the corridor nature of the valley.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>• The flatter floodplains that exist between the more elevated Wharehuanui Hills and upper Slope Hill area.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>• Improved pasture grass is the dominant land cover.</li> <li>• Mature exotic shelterbelt trees cut across the landscape unit.</li> <li>• Rural character buildings including farm buildings and dwellings.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>• Pastoral farming.</li> <li>• Rural Residential.</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li>• <b>4 - Moderate to low</b> ability to absorb further appropriate development.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>• Housing should be set back from Speargrass Flat Road against the north facing escarpment.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>• Open land leading to the south facing slopes should remain open and productive.</li> <li>• All elements within this landscape should perpetuate the existing rural character or highlight the natural character of the adjoining escarpments.</li> <li>• Continued and accelerated management of wilding species.</li> </ul>

**U10 East Speargrass Flat Landscape Unit**



Figure 32: View from the Bendemeer Hills looking west towards East Speargrass Flat.



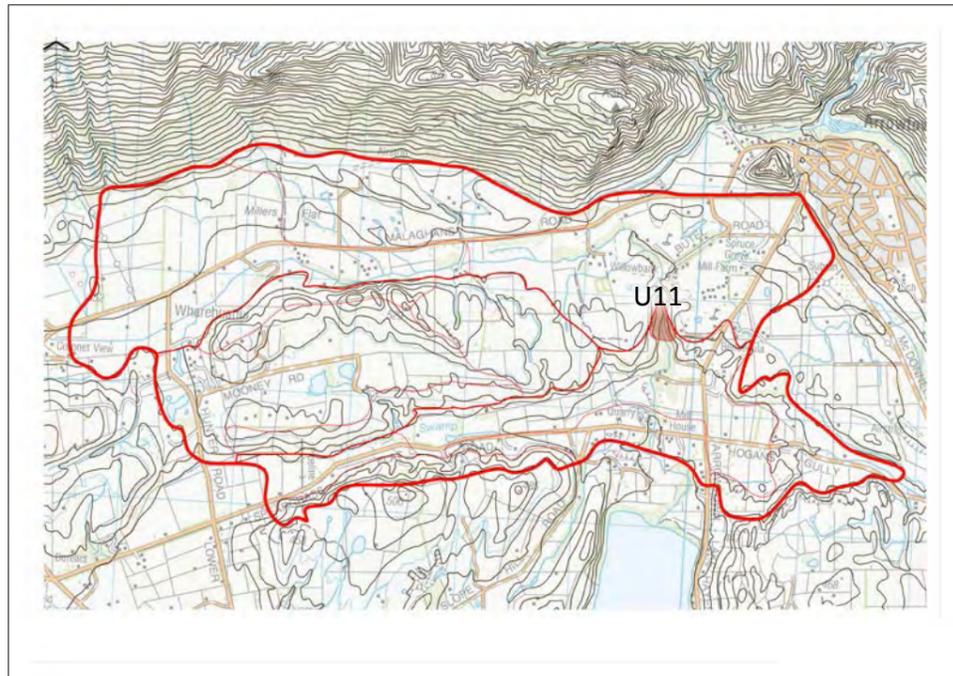
SUMMARY OF LANDSCAPE VALUES	EAST SPEARGRASS FLAT LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>Moderate to high visibility from the Lake Hayes / Arrowtown Road, Hogans Gully Road, and Speargrass Flats Road.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>Moderately undulating landscape of floodplains transitioning from the Upper Hills and Rural Resort Units to the north to the Lake Hayes Rural Residential Area to the south.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>Improved pasture grass is the dominant land cover.</li> <li>Swathes of exotic and native plantings exist within the more residential portions of this unit.</li> <li>Rural dwellings and farm buildings.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>Rural Residential Living</li> <li>Recreation</li> <li>Pastoral farming</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li><b>4 - Moderate to low</b> ability to absorb further appropriate development within discrete pockets of land.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>Housing clusters set back from Speargrass Flat Road amongst existing vegetation.</li> <li>Open pastoral lands to remain.</li> <li>Ecological plantings around surface waters.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>Pastoral, rural elements to be retained and enhanced.</li> <li>Enhance ecological planting along riparian areas.</li> <li>Continued and accelerated management of wilding species.</li> </ul>

EVALUATION

**U11 Waterfall Park Landscape Unit**



Figure 31: The waterfall in Waterfall Park.

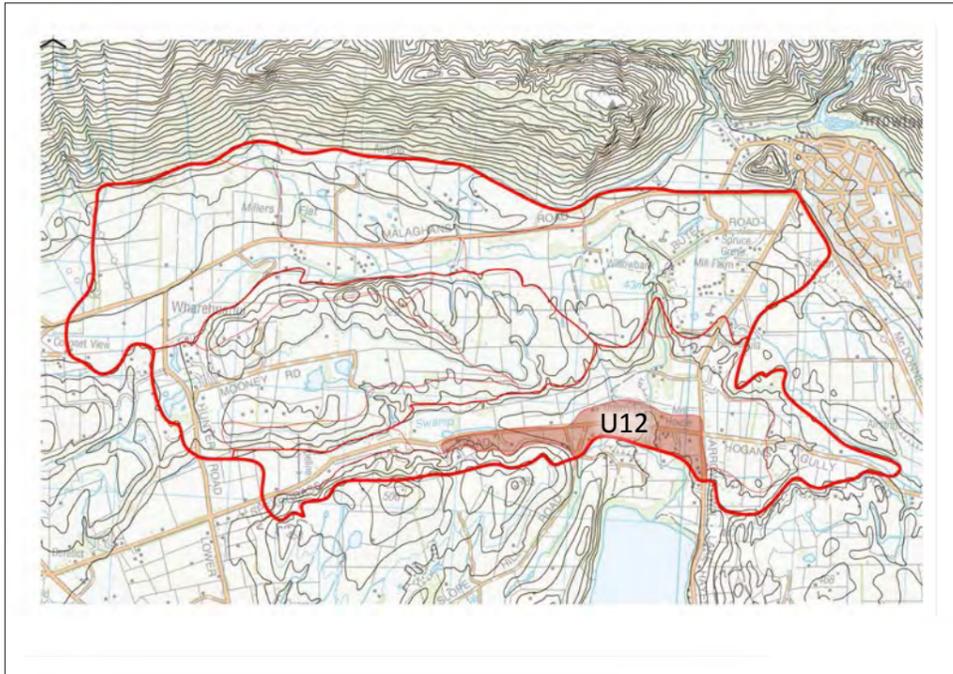


SUMMARY OF LANDSCAPE VALUES	WATERFALL PARK LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>• Visibility into the unit is extremely limited due to existing trees and surrounding topography.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>• Mill Creek cascades down a rocky terrace face in this distinct gorge.</li> <li>• Steep wall surround the east, west and north walls of this landscape unit, which then opens to the south.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>• Thick, mostly exotic and naturalized plants.</li> <li>• Evidence of previously existing and struggling native vegetation.</li> <li>• Residential and visitor facilities.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>• Rural residential</li> <li>• Historical event facility.</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change  <i>Note: The Waterfall Park Structure Plan allows for further development. This evaluation considers further development beyond what is permitted.</i>	<ul style="list-style-type: none"> <li>• <b>4 - Moderate to Low</b> ability to absorb further appropriate development.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>• Visually cut off from the rest of the valley.</li> <li>• Natural character is stronger than rural character.</li> <li>• Flooding potential</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>• Clearance of selected wilding exotics.</li> <li>• Highlight distinct heritage.</li> <li>• Retention and enhancement of natural values.</li> </ul>

**U12 Lake Hayes Rural Residential Landscape Unit**



Figure 32: Letterboxes off Speargrass Flat Road.



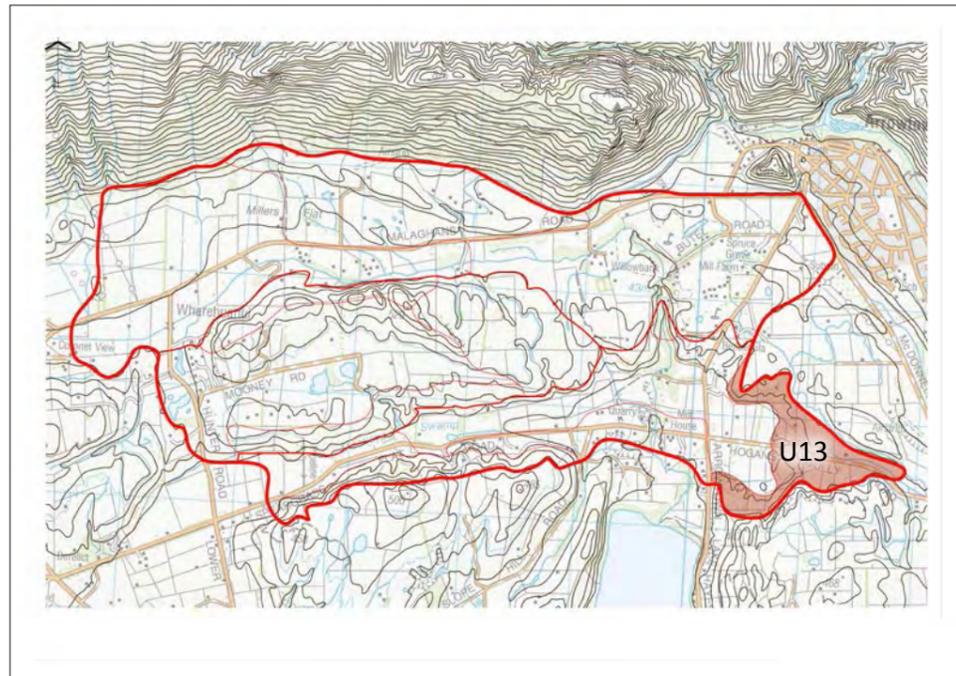
SUMMARY OF LANDSCAPE VALUES	THE LAKE HAYES RURAL RESIDENTIAL LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>• Visibility into the site is often limited due to existing trees.</li> <li>• Properties that adjoining Speargrass Flat Road are highly visible.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>• Undulating and descending landforms extend from the Speargrass Flats towards Lake Hayes.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>• Mown pasture grasses and lawns are the dominant land cover.</li> <li>• Dense patches of mature exotic trees extend along roads and waterways.</li> <li>• Swathes of exotic and native amenity planting exist in the vicinity of residential dwellings.</li> <li>• Suburban/rural dwellings.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>• Rural residential living</li> <li>• Limited pastoral farming</li> <li>• Business (Walnut Cottage)</li> <li>• Visitor Accommodation.</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li>• <b>2 - Moderate to high</b> ability to absorb further appropriate development.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>• Housing clusters set back from Speargrass Flat Road.</li> <li>• Continuation of rural and pastoral character elements.</li> <li>• Ecological plantings around waterways.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>• Setback from Speargrass Flat Road to be in excess of 10m.</li> <li>• Building and landscape design should take cues from the surrounding rural and natural elements.</li> <li>• Continued and accelerated management of wilding species.</li> </ul>

EVALUATION

**U13 Hogans Gully Landscape Unit**



Figure 33: Near Hogans Gully Road looking north across the Hogans Gully Unit



SUMMARY OF LANDSCAPE VALUES	HOGANS GULLY LANDSCAPE UNIT
Visibility	<ul style="list-style-type: none"> <li>• Visibility into the site is limited to the vicinity of Hogans Gully Road and the Lake Hayes/ Arrowtown Road intersection.</li> </ul>
Land Form	<ul style="list-style-type: none"> <li>• A gully land-form descends between two terraces.</li> <li>• The western Hogans Gully unit overlaps with the Eastern Speargrass Flats Unit.</li> </ul>
Land Cover	<ul style="list-style-type: none"> <li>• Improved pasture grass is the dominant land cover.</li> <li>• Mature shelter belts extend across the flatter lands.</li> <li>• Swathes of exotic and native plantings exist in the vicinity of rural residential developments.</li> <li>• Rural residential and rural character buildings.</li> </ul>
Land Use	<ul style="list-style-type: none"> <li>• Pastoral farming</li> <li>• Rural residential living.</li> </ul>
<b>EVALUATION AND RECOMMENDATIONS</b>	
Ability to Absorb Change	<ul style="list-style-type: none"> <li>• <b>2 - Moderate to high</b> ability to absorb change along the base of the north facing escarpment.</li> <li>• <b>4 - Moderate to low</b> ability to absorb further appropriate change. Existing zoning allows for future subdivision on or near the south facing slopes.</li> <li>• <b>5 - Low</b> ability to absorb change on the open flatlands near the Junction of Speargrass Flat and Hogans Gully Roads.</li> </ul>
Development Issues and Opportunities	<ul style="list-style-type: none"> <li>• Ecological plantings on terrace escarpment faces can enhance natural character.</li> <li>• Appropriate residential development is limited to the southern portions of the unit.</li> <li>• Retention of flat, open lands by the intersection of Speargrass Flat Road and Hogans Gully Road.</li> </ul>
Landscape Management Strategies	<ul style="list-style-type: none"> <li>• Pastoral lands to remain mostly in active productive use.</li> <li>• Upper portions of gully highly susceptible to degradation</li> <li>• Further appropriate development against the north facing terrace face can occur under existing zoning.</li> <li>• Enhance ecological planting along escarpment faces. .</li> <li>• Continued and accelerated management of wilding species.</li> </ul>

## 8.0 Recommendations and Conclusions

### 8.1 Summary

A significant portion of the Wakatipu Basin was the subject of this study. The area, dubbed the Wharehuanui, exists generally between Arrowtown, Lake Hayes and Hunter Road. This area was considered to be composed of three landscapes; the Mill Creek Catchment, the Wharehuanui Hills and the Speargrass Flats.

Each landscape is considered to be composed of separate landscape units. These landscape units were determined by repeated site visits and studies of the available and applicable information including ecology, geology and tenure. These attributes were then analysed to define each unit's land form, land cover and land use. Overall this analysis determined the landscape units overall character.

Following on from the character analysis, an evaluation of the landscape's ability to absorb change without significantly diminishing the landscape character and quality was provided. Development issues and opportunities were identified as were landscape management strategies.

It was determined that the Wharehuanui area has pockets within it ranging from low to high ability to absorb change. It was also determined that in all instances, change should occur in a manner which employees and reflects the character elements of the place, be they cultural or natural. This reflection could take the form of design controls, retention of open space, protection of specific features, etc.

Figure 34: Sunrise in the Rural Resort Landscape Unit.



### 8.2 Recommendations (Refer to Appendix J)

The following is a summary of the findings in terms of the landscapes ability to absorb change.

- Escarpment faces, including Malaghans North Facing Escarpment and Speargrass South and North Facing Escarpments are considered to have a **low** ability to absorb change. These escarpment faces are susceptible to degradation as they are highly visible, often form a ridge or skyline and contain a high degree of natural character.
- The slopes leading up The Foothills landscape unit are also deemed to have a **low** ability to absorb change. These slopes display a distinct rolling hills land form similar to the escarpment faces. They form a ridge complex between Malaghans Road and the ONL slopes. A roche moutonnée feature to the south of Malaghans Road is included in this area. The landforms have a moderately strong rural character with patches of vegetation. They are highly visible and legible and any inappropriate development would likely lead to the degradation of this area's values and quality.
- The uppermost hills of the Upper Hills landscape unit are also deemed to have a **low** ability to absorb change. These hills contain significant hummocks which form the uppermost ridge and skyline of the Wharehuanui as seen from several public views. The open character of these hills and their natural form would be degraded should any inappropriate development occur on them.
- A pocket of open space near the intersection of Speargrass Flat Road and the Lake Hayes – Arrowtown Road is considered to have a **low** ability to absorb change. This pocket exists on the overlapping boundaries between the East Speargrass Valley and the Hogans Gully unit. It is considered that the highly visible nature of this area, its strong rural character and high degree of openness would be degraded should inappropriate development occur.
- Much of the Rural Resort and East Speargrass Valley and a small portion of the Hogans Gully units are considered to have a **moderate to low** ability to absorb change. Residential activities has formed part of these unit's existing character, but the landscape still retains a high degree of openness and rural character. It is considered that appropriate development could occur in certain pockets within these units, but that they are close to crossing the threshold with respect to the landscape's ability to absorb change.
- The broader flatlands of the Millers Flat unit are considered to have a **moderate to low** ability to absorb change. These broad flatlands are significant in the valley and offer distinct open views across the flatlands to the contrasting slopes and hummocks. Limited development could occur within this area but would need to be very strategic and directed to not adversely affect the landscape values and quality.
- Much of the Upper Hills unit is considered to have a **moderate** ability to absorb change. The strong open rural character and hummocky landforms of this area are susceptible to degradation due to inappropriate development. However the plateaus within the unit offer areas where appropriate development could occur without degrading the landscape's values or quality.
- A portion of land in the Wharehuanui Plateau unit adjacent to Hunter Road is considered to have a **moderate** ability to absorb change. Existing development in this area has degraded the rural character to a moderate degree. Appropriate development could occur in this area, however it's capacity to absorb change is limited.
- The flatter more northerly portions of The Foothills are considered to have a **moderate to high** ability to absorb change. These flatter portions, while displaying a strong rural character are not visible from the most public places. It is considered that appropriate development could occur in this area without degrading the quality or character of the landscape.

- A long strip of land taking in all of the Lake Hayes Rural Residential unit and the southern portion of the Hogans Gully unit is considered to have a **moderate to high** ability to absorb change. This strip of land already displays a strong rural residential character. It is considered that further appropriate development could occur in several pockets within this area without degrading the landscape's values or quality.
- Waterfall Park is a small, isolated landscape unit deemed to have a **high** ability to absorb change. It's surrounding land form and vegetation visually encloses it. Its character is more natural than rural and it is considered that appropriate development could occur without degrading and perhaps enhancing this landscape unit's values.
- The Wharehuanui Plateau is visually isolated and most existing development is only visible form within the unit. It is considered that the flatlands and gently rolling hills within this plateau have a **high** ability to absorb change so long as elements of the existing rural character are employed and development does not impede on the character of the adjacent escarpments or hills.

### 8.3 Conclusions

The Wharehuanui displays a range of landscape values and characters ranging from rural residential, distinctly rural, to highly natural. Ridge-lines, skylines, and escarpment faces are considered to be the landforms that are most susceptible to degradation. However these faces and ridges visually screen internal portions of land. These less visible pockets of land could accommodate appropriate development.

Significant areas of open character, specifically the lands in the vicinity of the intersection of Lake Hayes Estate – Arrowtown Road and Speargrass Flat Road as well at the broader flatlands of Millers Flat are susceptible to degradation resulting from inappropriate development. Any development within these areas needs to be strategic and directed as to not degrade the distinct open character.

Much of the Rural Resort and Western Speargrass Valley units are near their capacity to absorb change.

Waterfall Park and much of the Wharehuanui Plateau is well suited to absorb further appropriate development.

Development is also possible in pockets of land where it can be visually absorbed by the landscape. This includes the lands at the base of escarpments and the plateaus and valleys located between hummocks and gullies.

The Wharehuanui is a diverse area with strong natural and rural character values. Development to date has provided much of that character and in order for it to be retained future development should be directed and strategic. This report has provided a description of the landscape, an analysis of its character and an evaluation of its ability to absorb change. The recommendations of this report are intended to be used as a guide when considering future development within the area.

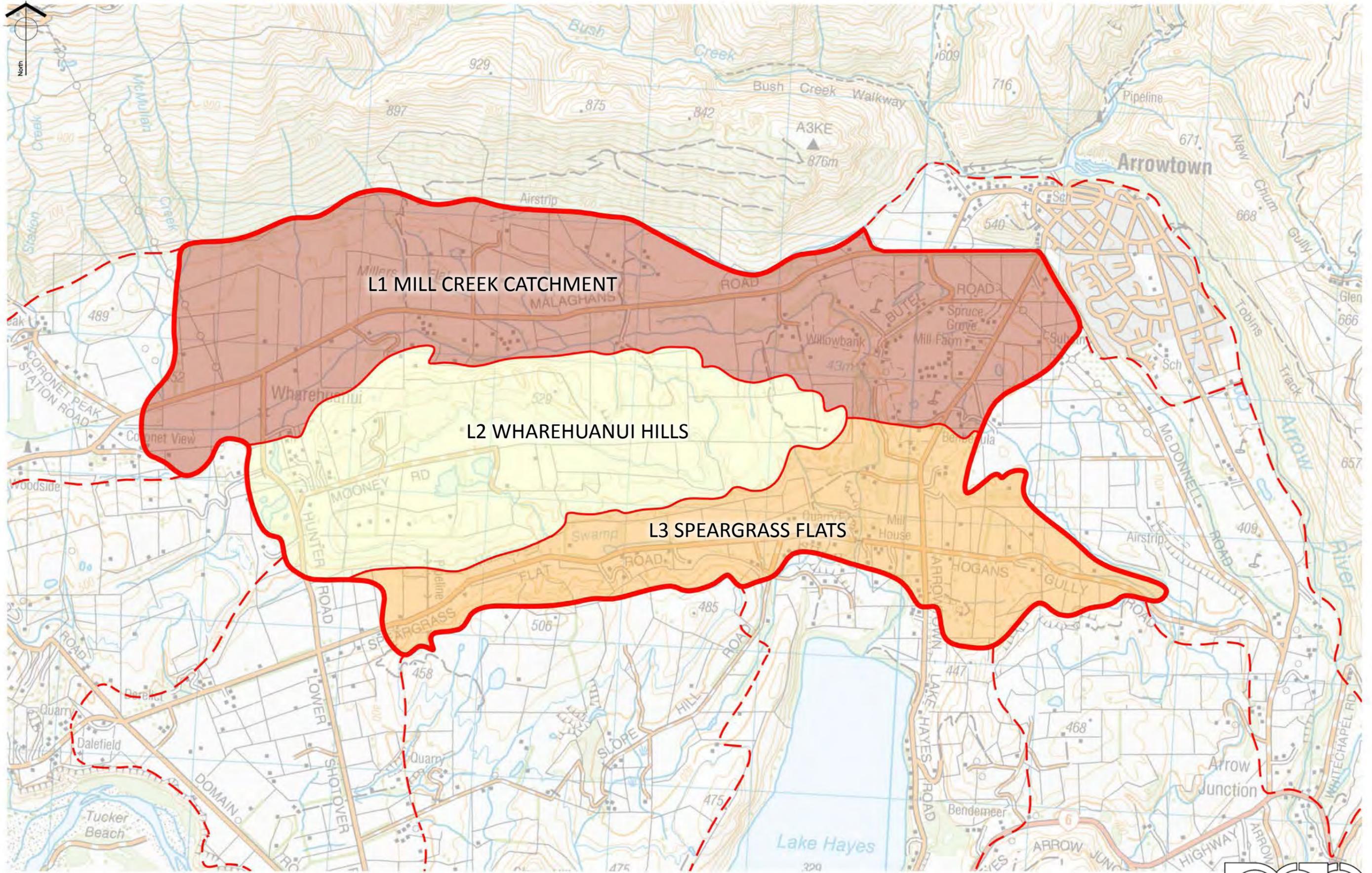
Conclusion

**Figure 35:** Looking northeast across much of the Wharehuanui area. The intersection of Hogans Gully and Speargrass Flat Road is seen in the lower left,

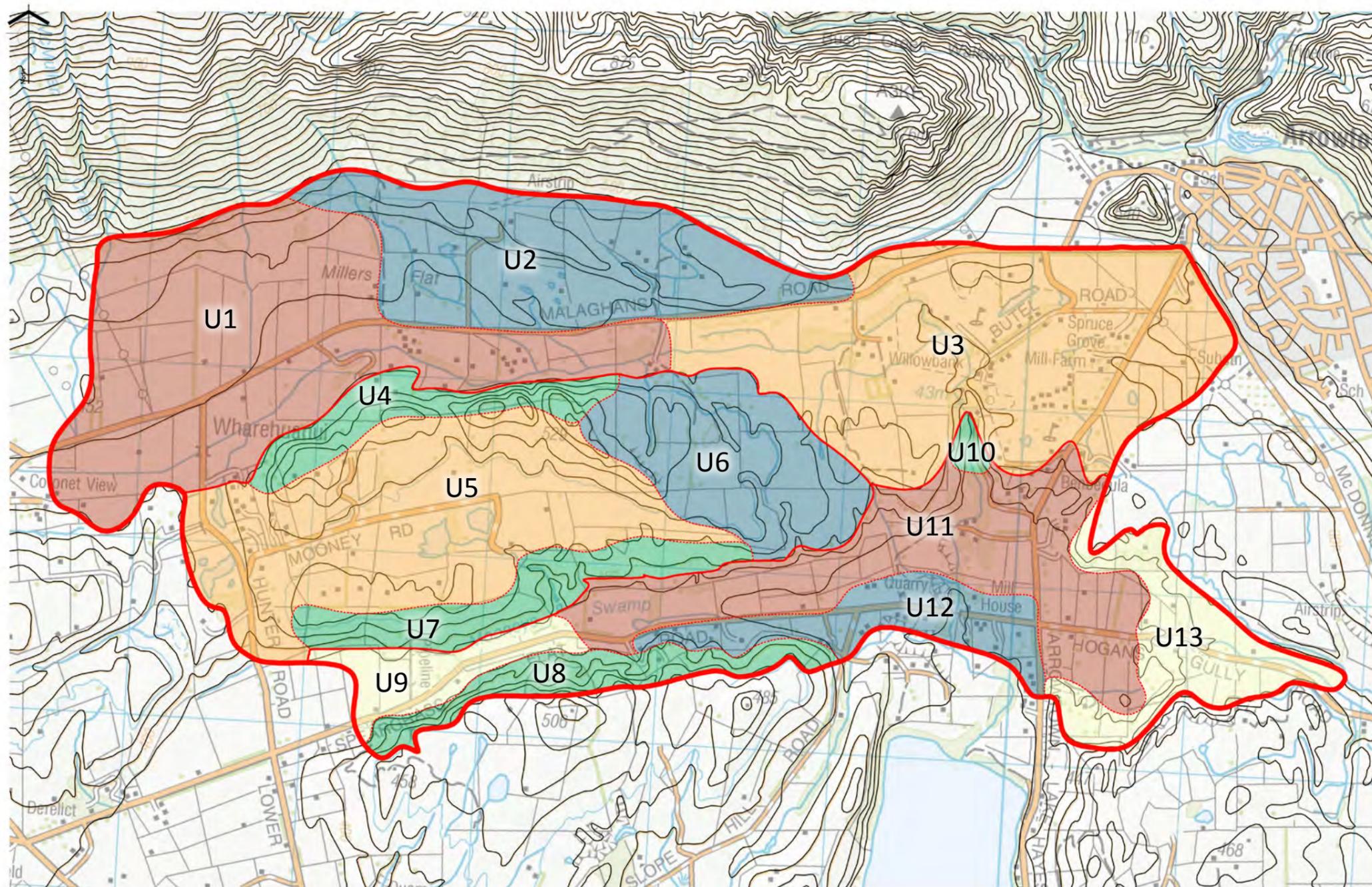




Appendix



Appendix **A** - WHAREHUANUI STUDY AREA AND LANDSCAPES  
 Scale 1:25000 @ A3



**LANDSCAPE UNITS**

**Mill Creek Catchment**

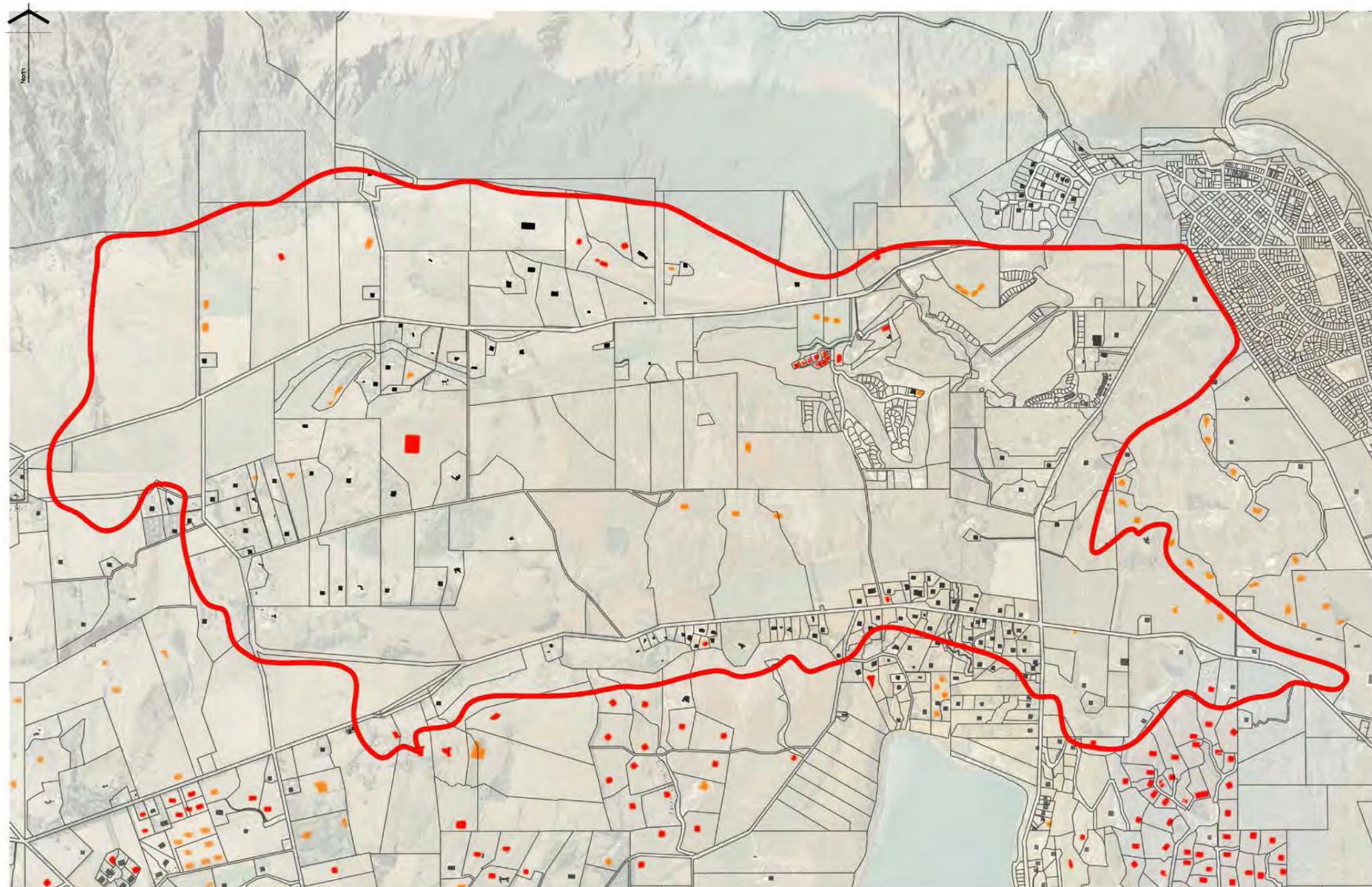
- U1 Millers Flat
- U2 The Foothills
- U3 Rural Resort
- U4 Malaghans North Facing Escarpment

**Wharehuanui Hills**

- U5 Wharehuanui Plateau
- U6 Upper Hills

**Speargrass Flats**

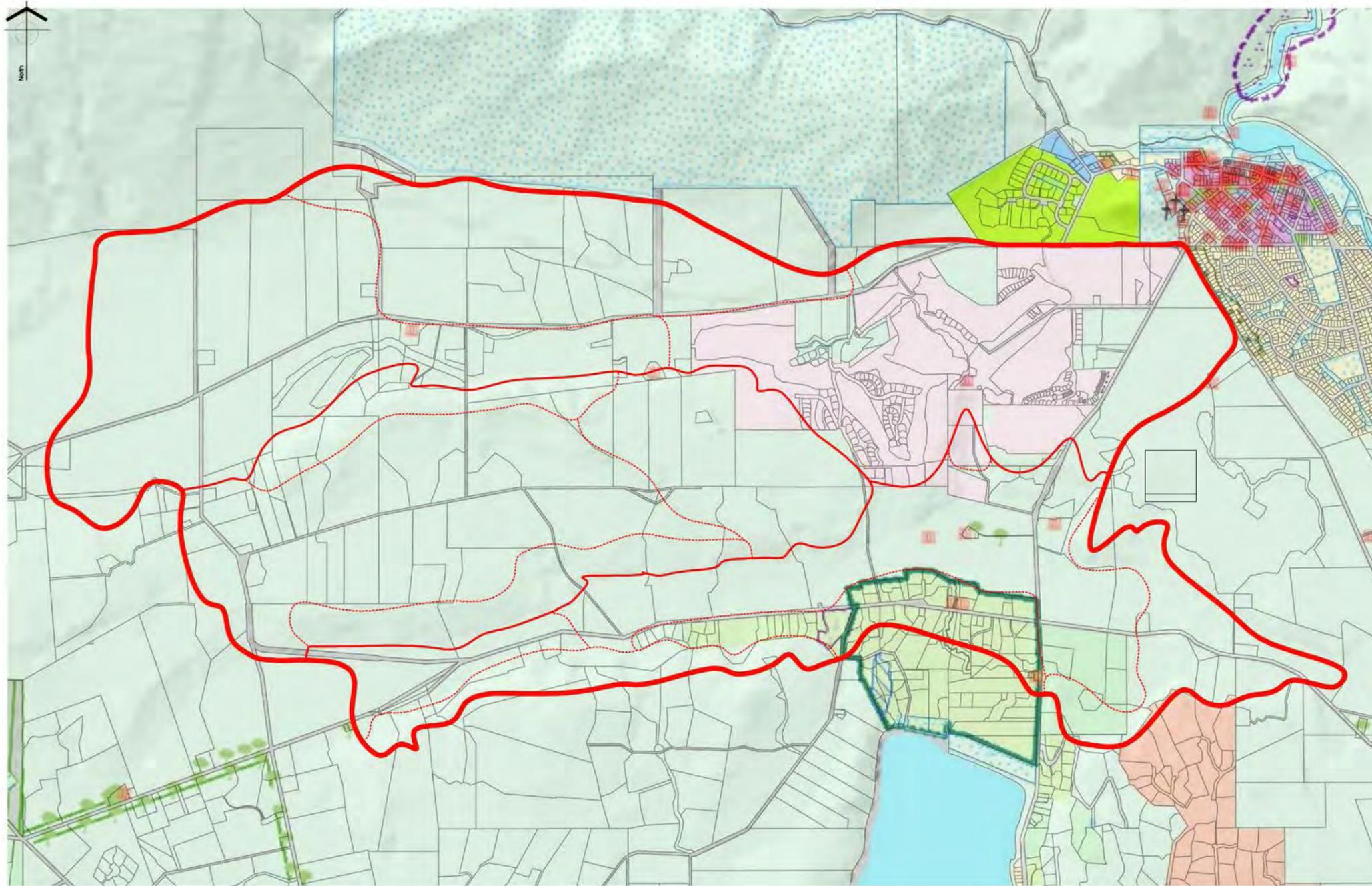
- U7 Speargrass South Facing Escarpment
- U8 Speargrass North Facing Escarpment
- U9 West Speargrass Valley
- U10 Waterfall Park
- U11 East Speargrass Valley
- U12 Lake Hayes Rural Residential
- U13 Hogans Gully



**QLDC Lot Boundaries and Residential Building Platforms**

-  Lot Boundaries
-  Approved Residential Building Platforms
-  Active Residential Building Platforms
-  Built Residential Building Platforms

Source: QLDC Webmaps and Rural Building Platforms 2014 map retrieved from QLDC website



**QLDC Zone Key**

-  Rural General
-  Resort
-  Meadow Park
-  Rural Residential - North Lake Hayes
-  Bendemeer
-  Residential Arrowtown Historic Management
-  Low Density Residential
-  Industrial
-  Designation
-  Protected Avenue of Trees
-  Protected Feature

Map adapted from QLDC Webmaps

**Appendix D - EXISTING ZONING**  
Scale 1:15,000 @ A3





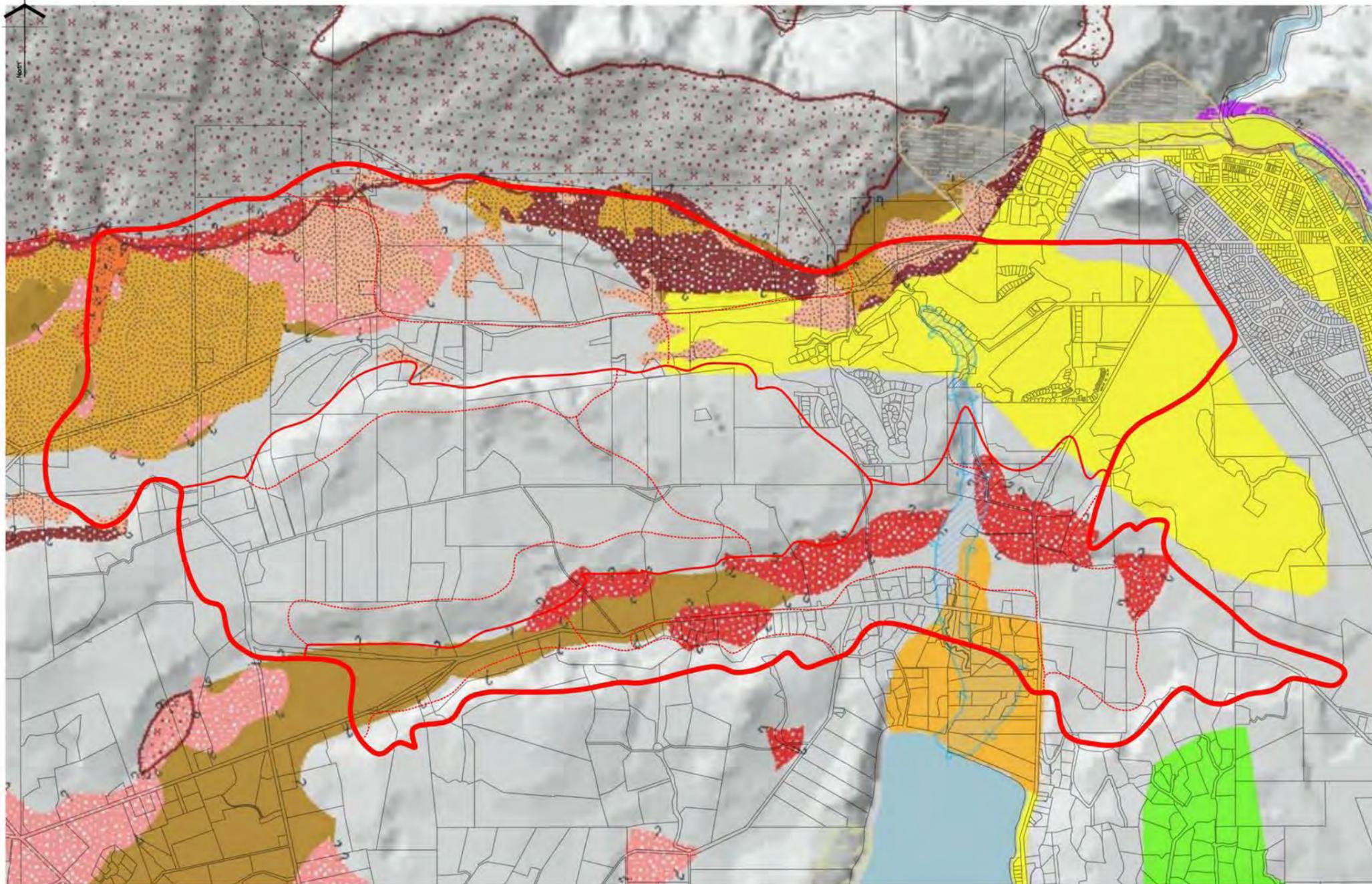
20m Contours

Source: Quickmaps

# Appendix **E** - TOPOGRAPHY

Scale 1:15,000 @ A3

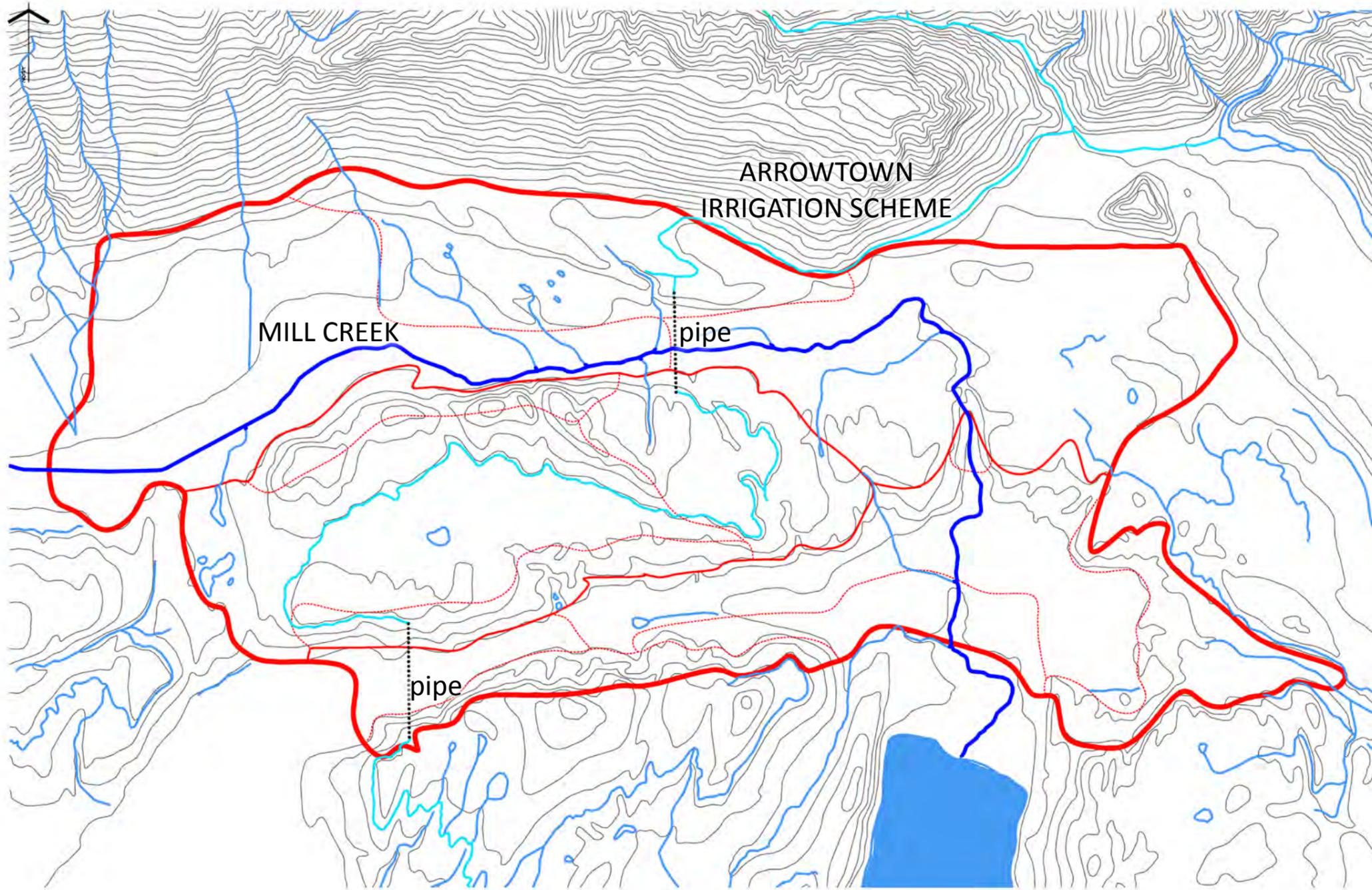




**QLDC Hazards Key**

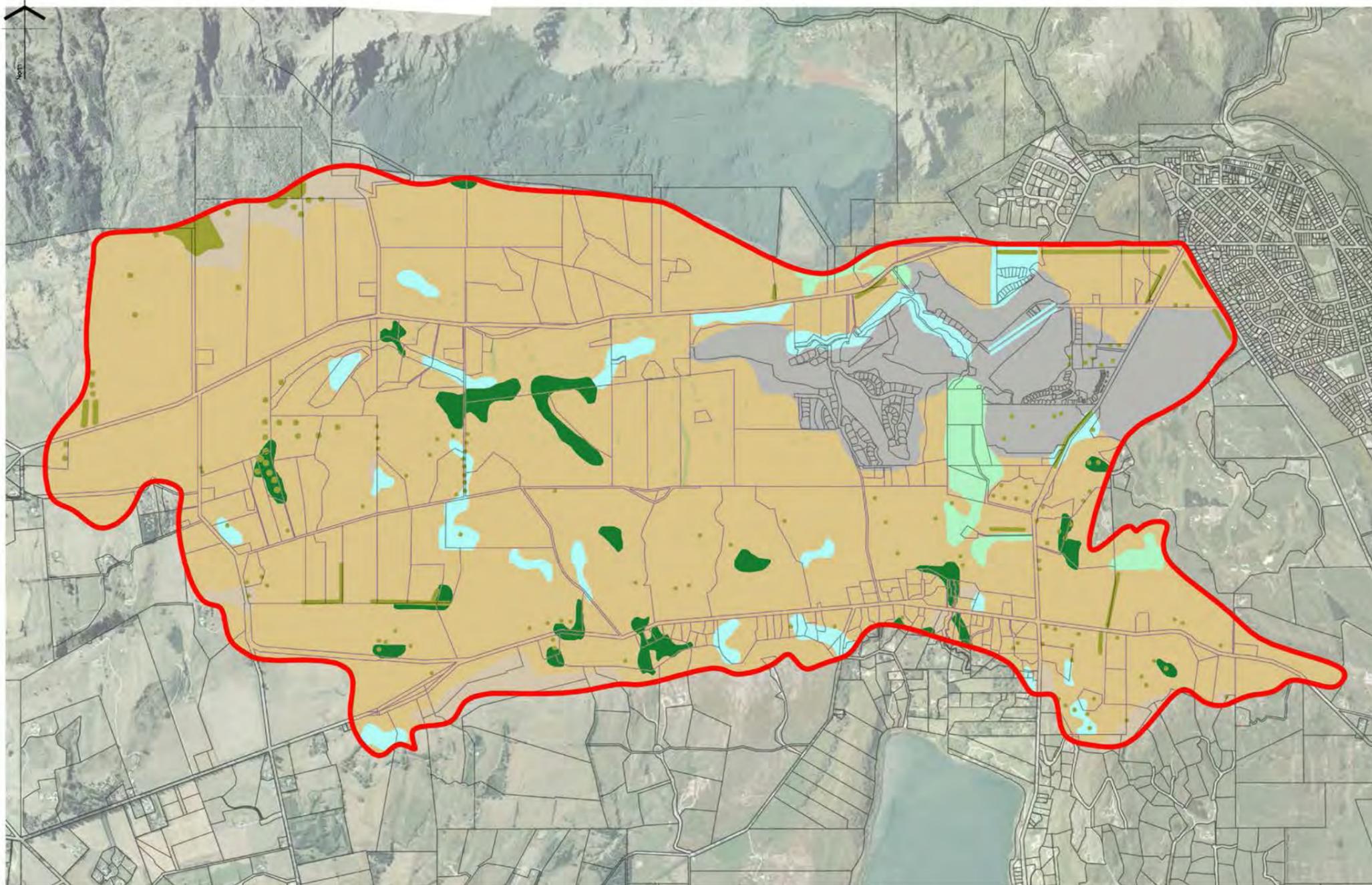
-  Landslide Area - non verified
-  Alluvial Fan - ORC: fan recently active
-  Alluvial Fan - Regional Scale: Active, floodwater dominated
-  Alluvial Fan - (Regional Scale) Active, Debris-dominated
-  Alluvial Fan - ORC: fan less recently active
-  Liquefaction Risk: Nil to Low
-  Liquefaction Risk: Probably Low
-  Liquefaction Risk: Possibly Moderate
-  Liquefaction Risk: Susceptible
-  Flooding due to Rainfall

Map adapted from QLDC Webmaps Hazard data. Davis Consulting Group.  
 Note: Hazards may not be comprehensive



 Surface waters

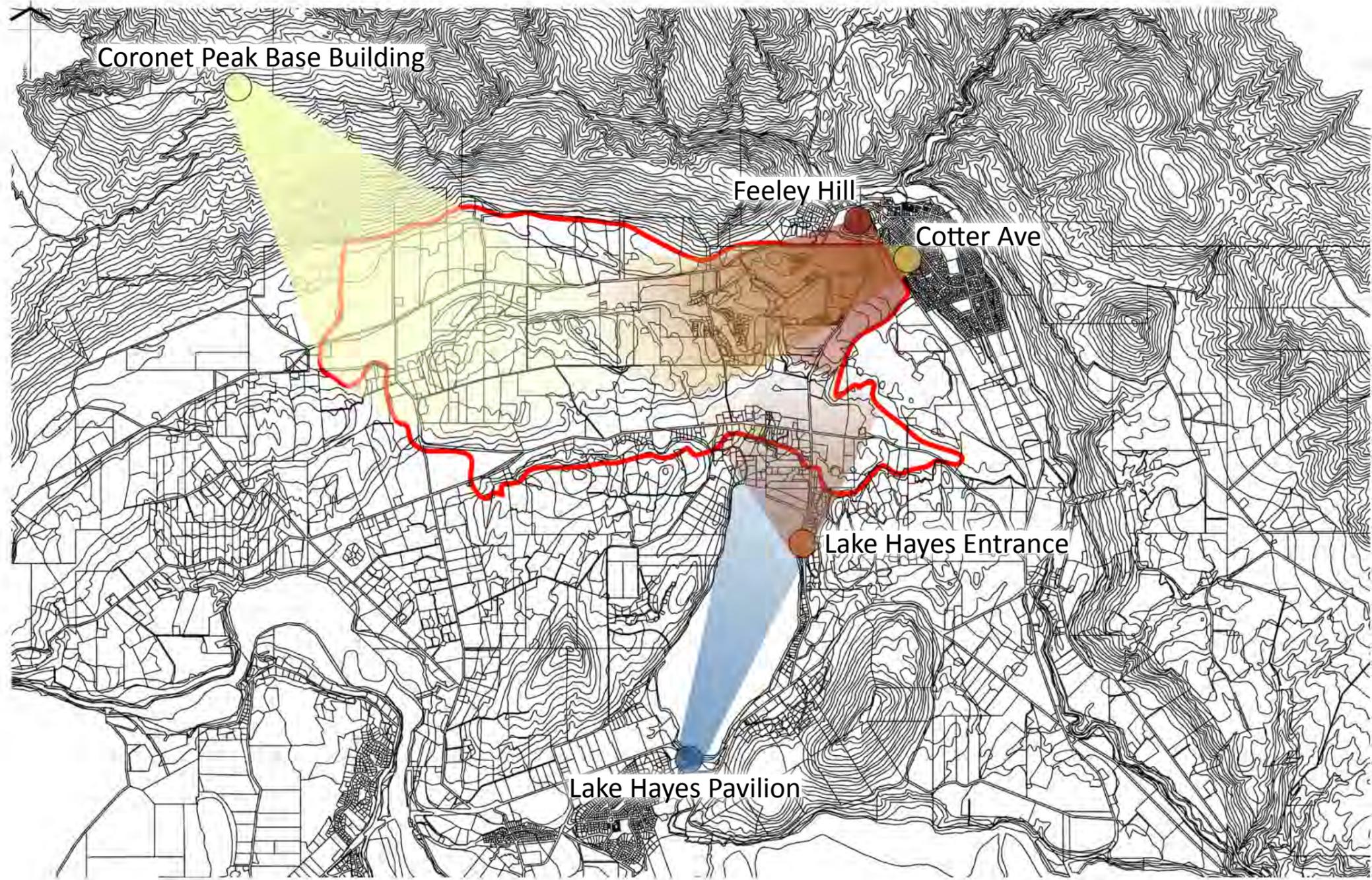
Source: Quickmaps



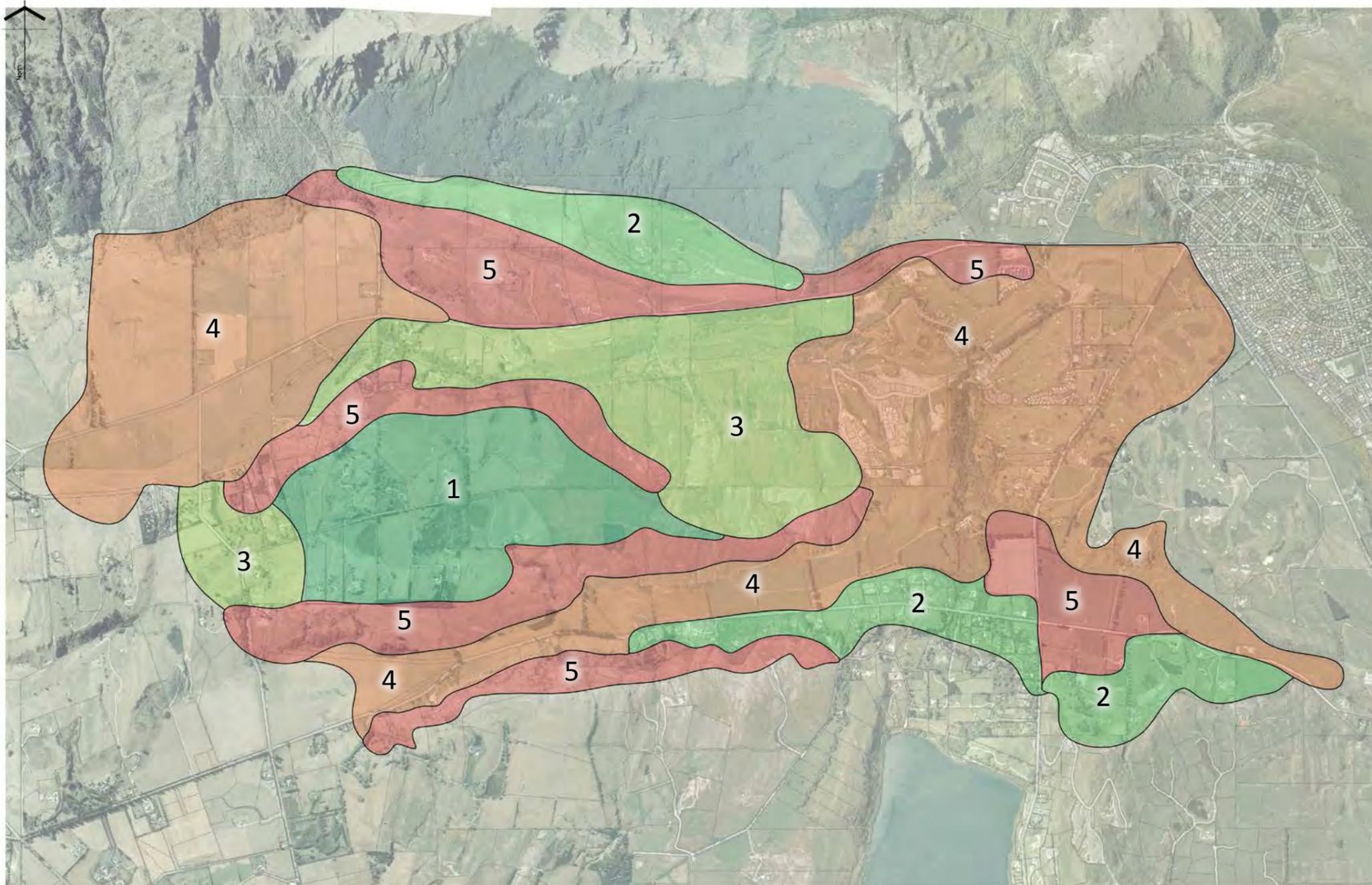
**Ecology Key**

-  Urban Parkland / Open Space
-  High Producing Exotic Grassland
-  Indigenous Forest
-  Manuka and/or Kanuka
-  Deciduous Hardwoods
-  Low Producing Grasslands
-  Exotic Forest

Map dated from data provided by the Davis Consulting Group, site visits and site photos.



Note: Views are from selected key viewpoints outside the study area.



**Ability To Absorb Change**

- 1 High
- 2 Moderate to High
- 3 Moderate
- 4 Moderate to Low
- 5 Low

**Appendix J - ABILITY TO ABSORB CHANGE**  
 Scale 1:15,000 @ A3

