BEFORE THE HEARINGS PANEL
FOR THE QUEENSTOWN LAKES PROPOSED DISTRICT PLAN

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of Hearing Stream 2 – Rural, Rural Residential and Rural Lifestyle, Gibbston Character Zone, Indigenous Vegetation and Biodiversity, and Wilding Exotic Trees

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REPLY OF CRAIG ALAN BARR
ON BEHALF OF QUEENSTOWN LAKES DISTRICT COUNCIL

CHAPTER 33 - INDIGENOUS VEGETATION AND BIODIVERSITY

3 June 2016

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1. INTRODUCTION

1.1 My name is Craig Barr. I prepared the section 42A report for the Indigenous Vegetation and Biodiversity Chapter of the Proposed District Plan (**PDP**). My qualifications and experience are listed in that s42A report dated 7 April 2016.

1.2 I have reviewed the evidence and submissions filed by other expert witnesses and submitters both in advance of and during the Rural hearing, and attended the hearing except on 25 May 2016 where I was provided with a report of the information from submitters and counsel presented on that day.

1.3 This reply evidence covers the following issues:

(a) Clarity and certainty with the provisions;
(b) Exemption of clearance within the Ski Area Sub Zones;
(c) Ecological management plans and farm management plans;
(d) Maintenance of Indigenous Biodiversity;
(e) The efficiency and effectiveness of the application of the Indigenous Vegetation Rules;
(f) Biodiversity offsetting;
(g) Ecosystem services;
(h) The 'application of water' as part of the definition of 'clearance of indigenous vegetation';
(i) Objectives and Policies;
(j) Exemptions for Utilities and The National Grid;
(k) Non-Complying Activity Status for Significant Indigenous Vegetation Clearance; and
(l) Scheduled Significant Natural Areas (**SNA**).

1.4 Where I am recommending changes to the provisions through considering submitter evidence and the hearing of evidence and submissions before the Panel, I have included those changes in **Appendix 1** (**Revised Chapter**). I have also attached a section 32AA evaluation in **Appendix 2**.

1.5 In addition I attach the following to my evidence:

(a) **Appendix 3** – updated flow diagram of the Chapter 33 Rules;

(b) **Appendix 4** – examples of resource consents for 'Whole of Farm Operations'; and

(c) **Appendix 5** – Mr Glenn Davis' responses to questions from the Panel: Re: Additional Information Request from Hearings Panel – Queenstown Lakes District Proposed District Plan (*Hearing Panel questions*).

2. CLARITY AND CERTAINTY WITH THE PROVISIONS

2.1 It appears a number of submitters have misinterpreted Permitted Activity Standard 33.5.3 where it identifies Acutely or Chronically Threatened Land Environments as defined by Land Environments of New Zealand at Level IV. The Panel also raised the matter that the rules in particular could be drafted so they are clearer.

2.2 Rule 33.5.3 states:

> *Within a land environment (defined by the Land Environments of New Zealand at Level IV) that has 20 percent or less remaining in indigenous cover, clearance is less than 500m² in area of any site and, 50m² in area of any site less than 10ha, in any continuous period of 5 years (refer to section 33.9).*

2.3 The drafting of the rule is technically correct in so far that it refers to a land environment that has 20 percent or less remaining in indigenous cover. The reference to 'land environment' is to the Landcare research land environments of New Zealand, and not to an area somewhere that has a coverage of less than 20% of indigenous vegetation. This is clear because the following statement in brackets refers to the Land Environments of New Zealand. However, a simpler drafting solution could be to simply refer to the relevant maps in Schedule 33.9 of the PDP that identify land environments with 20% or less remaining indigenous cover, being either acutely (<10%) or chronically (10%-20%) threatened land environments, then the

standard should identify the permitted clearance within these areas. On sites less than 10ha in area this is 50m² and on sites more than 10ha this is 500m², within any five year period

2.4 The recommended revised chapter in **Appendix 1** contains modifications in response to these concerns. These modifications are to do with clarity and do not make any substantive changes.

2.5 During the hearing I presented to the Panel a flow diagram[1] of the rules and the pathway to permitted activity status associated with vegetation clearance. The Panel also suggested that I include the respective rules to assist understanding. This has been completed and an updated flow diagram is attached at **Appendix 3**.

3. EXEMPTION OF CLEARANCE WITHIN THE SKI AREA SUB ZONES

3.1 The Department of Conservation (**DOC**) confirmed during the course of the hearing that that they have withdrawn their further submission (FS 1080.14) opposing NZ Ski's request that an exemption, to the clearance of indigenous vegetation rules, is provided within the Ski Area Sub Zones where approval has been provided by DOC, and the land is administered under the Conservation Act 1987.

3.2 During the course of the hearing the Panel requested that the Council propose wording for such a rule. The suggested rule was filed on 16 May 2016.[2] I continue to consider that the suggested rule filed on 16 May 2016 is appropriate and if the Panel seek to adopt this rule no additional modifications are proposed.

3.3 Related to this matter was the evidence of Mr Farrell and Ms Fiona Black for Real Journeys Limited (#621) who seek an exemption on 'private land' within the Ski Area Sub Zones that permits clearance of indigenous vegetation clearance. I do not consider this is appropriate. I consider that for the Council to provide for this exemption it would not be fulfilling its function under section 31 of the RMA to maintain indigenous biological diversity. In addition, where

1 Memorandum field on 16 May 2016. http://www.qldc.govt.nz/planning/district-plan/proposed-district-plan/proposed-district-plan-hearings/pre-hearing-documents-issues-by-hearings-commissioners/.
2 Memorandum filed on 16 May 2016. http://www.qldc.govt.nz/planning/district-plan/proposed-district-plan/proposed-district-plan-hearings/pre-hearing-documents-issues-by-hearings-commissioners/.

there are plants or communities that qualify as significant, I consider that the Council would fall short of its obligations under section 6(c) of the RMA to protect areas of significant indigenous vegetation and significant habitats of indigenous fauna.

3.4 I also note that Real Journeys has not provided any evidential basis to prove that providing such exemptions within the Ski Area Sub Zones is appropriate in terms of the values of the indigenous vegetation within these areas. On this basis I recommend their submission be rejected.

4. ECOLOGICAL MANAGEMENT PLANS AND FARM MANAGEMENT PLANS

4.1 Mr Fergusson for submitters Soho Ski (#610) and Treble Cone (#, 613) requests the inclusion of provisions for a controlled activity status for indigenous vegetation clearance within the Ski Area Sub Zones[3] where this is supported by an ecological management plan. While the concept has merit, and would provide a holistic view of the overall management of indigenous biodiversity on land within the Ski Area Sub Zones, I do not support the controlled activity status because irrespective of the quality of the application and the negative or redeeming components, it forces the Council's hand to grant the consent, even if the adverse effects on indigenous biodiversity were significant Fundamentally this would not allow the Council to fulfil its functions in terms of section 31 or section 6(c) of the RMA.

4.2 As set out below, there is an opportunity for a ski field operator to apply for a management type resource consent that covers an expansive area and would have a 20 year duration that could cover future ski field improvements or infrastructure installation. This type of resource consent is not discouraged by the Council but it is up to the proponent to apply for it. If a ski field operator is frustrated by the need for a series of 'one-off' approvals this method is currently available. I therefore do not support the introduction of the provisions set out by Mr Fergusson.

3 I note that I am assuming this is not on DOC land.

4.3 During his appearance at the hearing Mr Espie for JBIL (#784) criticised the regulatory process with respect to the costs and nuisance for landowners to have to apply for multiple resource consents. In addition Mr Sam Kane made the point that the permitted standards proposed would make it difficult to control indigenous vegetation on his farm because clearing 500m² within an area identified as an acutely or chronically threatened land environment is inefficient, and would not allow him to appropriately manage his property.

4.4 Mr Espie promoted the use of farm management plans as better ways to look holistically at farm operations and environmental management over an entire property, instead of a piecemeal approach in addressing the District Plan rules on a case by case basis.

4.5 A review of resource consents granted under the ODP regime, which should not be different under the PDP in terms of the ability to apply for these types of consents provides the opportunity for the entire landholding/farm operation to be considered if the proponent chooses to.

4.6 The majority of resource consents granted for indigenous vegetation clearance in the District have been for large landholdings in the thousands of hectares and the consents have a 20 year duration.

4.7 The resource consents granted for the 'whole of farm' and for a 20 year duration provides the consent holder the ability to clear indigenous vegetation as part of the farming operation and within budget and seasonal constraints. This also addresses the reality that the longer indigenous vegetation is left to regenerate, the more likelihood it has of its values increasing. While I appreciate that this is counter to promoting indigenous biodiversity, the longer a landowner takes to apply for and obtain resource consent to clear indigenous vegetation, the harder it could be to obtain a resource consent if the values increase. Applying for a 20 year resource consent is a snap shot of the values on that land at that point in time.

4.8 The Council's ecologist Mr Davis has been involved with and provided advice on resource consent applications in the District for both the Council and landowners. I have sought advice from Mr Davis on the matter of the current practice of resource consents with regard to 'farm management plans' and recognition of the potential constraints of landowners. Mr Davis has advised as follows:[4]

> *Between 2008 and 2010 many of the high country station vegetation clearance consents expired. During this period, I am aware of at least 20 properties that prepared vegetation clearing applications and most of these applications covered vegetation clearing that was required across the whole property. The council made the decision at this time to provide consents for 20 years so that it would provide a reasonable timeframe for the clearing activities to be undertaken and provide farm managers with more certainty regarding their farm management. Most clearing activities were associated with the clearance of bracken fern dominated vegetation that had developed through pastures and was impacting farm productivity.*
>
> *The council reviewed applications and identified exclusion areas that were included in the applications. Key areas that were identified for exclusion included:*
>
> - *Exclusion of well mature beech forest, dry shrubland and broadleaved indigenous hardwood communities;*
> - *Buffer areas adjacent to waterways identified on the 1:50,000 topographic maps;*
> - *Exclusion of representative indigenous vegetation;*
> - *Exclusion of spraying activities in the vicinity of rocky outcrops and bluff systems; and*
> - *Exclusion of areas where indigenous vegetation had regenerated strongly through bracken fern.*
>
> *The process has essentially provided farm managers with a whole farm management plan of how they can maintain*

4 See **Appendix 5** at section 5.

and develop pastures throughout their farms and given them a reasonable timeframe to work within.

4.9 For the reasons set out above I do not consider the regulatory framework to be a hindrance to farming operations. The ability to apply for a resource consent for a 'whole of farm' resource consent with a 20 year duration is well established. I see no reason why this would change under the PDP.

4.10 I have provided examples of resource consents granted under the ODP regime in **Appendix 4**. Two examples are also addressed in Mr Davis' memoranda to the Council. There are other examples available for the Panel should they wish to see more.

5. MAINTENANCE OF INDIGENOUS BIODIVERSITY

5.1 Legal submissions filed by JBIL (#784) contended that there is no need to provide rules for indigenous vegetation that are not identified as an SNA or located within the alpine environment. This is because the SNA is where the significant indigenous vegetation is located and by protecting the indigenous vegetation within the SNAs, the Council has fulfilled its obligations.

5.2 This contention is not supported by any expert ecological evidence. I consider that it is flawed reasoning and many other stakeholders including the Council, DOC (#373) and Forest and Bird (#706) acknowledge that while the schedule of SNAs identified has significantly improved the areas within the District scheduled as SNAs, there will be areas that qualify as significant that have not yet been identified and scheduled. The three parties identified above are in agreement that the resource consent process and application of the 'significance criteria' in Policy 33.2.10 (in the recommended revised chapter) when assessing resource consents but also plan changes or other proposals, such as notices of requirements, is the most appropriate method for the Council to identify and protect significant areas that have not yet been identified.

5.3 Therefore, I consider that to not have any rules other than for scheduled SNAs and the alpine environment would be highly flawed and would not enable the Council to fulfil its function to maintain indigenous biodiversity.

5.4 I consider that the 'lower tier' of rules that control the permitted clearance of indigenous vegetation on land not identified as an SNA or within the alpine environment to be very important. This is also supported by Mr Davis in his evidence and in Issue 2 of the section 32 evaluation.

5.5 Related to this is the Council's use of the Threatened Environment Classification (**TEC**) that identifies 'land environments'. In the case of the PDP rules the Council has used those areas defined as 'chronically threatened' and 'acutely threatened' land environments as areas where it is not appropriate to have a relatively high area of permitted clearance (5000m²), and this has been reduced to 500m² on sites larger than 10ha, and to 50m² on sites smaller than 10ha.

5.6 Ms Maturin for Forest and Bird (#706) noted at the hearing that Forest and Bird are uncomfortable with the 5000m² permitted clearance and that the reduced area using the TEC and lower thresholds goes someway to alleviate this. Ms Maturin made the case that there is very little indigenous vegetation remaining within these land environments and their protection is important.

5.7 Mr Rance, a terrestrial ecologist speaking for DOC (#373) at the hearing, was clear in his view that the use of the TEC as a rule and as a 'surrogate' or indicator for areas where indigenous vegetation is likely to be significant is appropriate. Mr Rance also backed the use of TEC in terms of robustness of the data that feeds into the model.

5.8 I consider that the appropriateness of the use of the TEC is sufficiently covered in the section 32 evaluation report and in Mr Davis' evidence attached to the s42a report. In particular where the TEC is used as indicator for areas of potential significance.

5.9 Despite this evidence, in light of the doubts cast by at least 3 submitters[5] as to the efficacy of using the TEC, I have requested advice from Mr Davis as to the appropriateness of using the TEC, with particular respect to the only other opposing view from an ecologist, being Mr Espie for JBIL (#784):[6]

> *LENZ and the threatened environment classification (TEC) have not been used and are not proposed to be used in isolation as suggested by Dr Espie's evidence. However, when used alongside research into the pre-settlement distribution of indigenous vegetation and local ecological knowledge, the TEC is a useful district wide tool to provide context for the assessment of rarity of indigenous vegetation that remains in the district. Furthermore, the TEC highlights the areas in the district where vegetation cover is very restricted from its original distribution with these areas likely to support a disproportionately large percentage of New Zealand's most seriously threatened species, habitats and ecosystems (Walker, 2005).*
>
> *The TEC is widely used by district and regional councils, ecological practitioners and the Department of Conservation. The Otago Regional Council adopts the use of LENZ and TEC in Schedule 5 of the Proposed Regional Policy Statement that sets out the criteria for the assessment of significance of indigenous vegetation and habitats. Furthermore, LENZ and TEC are adopted in the Statement of National Priorities (MfE and DOC, 2007) with National Priority 1 promoting the protection of indigenous vegetation associated with land environments (LENZ) that have 20% or less remaining in indigenous cover.*
>
> *The PDP uses the TEC to support a tiered approach to the application of the vegetation clearing rules by reducing the permitted area of clearance in lowland environments where indigenous vegetation cover has been reduced to less than 20% of its original extent. The 20% indigenous vegetation cover remaining level has been adopted as species loss has been shown to accelerate when the area of habitat remaining falls*

5 Lake McKay Station (439), JBIL (784) Same Kane (590).
6 See **Appendix 5** at section 2.

below 20% (Statement of National Priorities, 2007 (see Appendix C); Walker et. al., 2015). This approach is consistent with regional and national policies.

There are limitations with LENZ, as inherent in all scientific models. These limitations have been documented in LENZ supporting documentation. The authors of LENZ promote the use of LENZ down to a scale of 1:50,000 and also note that ground truthing is necessary to support decision making. I agree that LENZ and the TEC should not be used in isolation but it has a useful and important role in providing some context around percentage indigenous cover remaining across the district. This is a context that cannot be provided in a site ecological assessment or an assessment of neighbouring vegetation but remains an important consideration, particularly in lowland environments where the remaining indigenous cover is often highly restricted.

5.10 I refer to and rely on Mr Davis's advice on this matter. Overall, I consider that the methods to maintain indigenous biodiversity using the TEC, including the ongoing identification of potential SNA's through development proposals is appropriate.

5.11 Mr Brown for Queenstown Park Limited (#806) and other submitters[7] seek the introduction of policies that recognise the positive benefits of activities that protect or rehabilitate indigenous vegetation. I accept that the objective and policy framework as notified takes a protective view but this reflects the reality that the majority of development proposals that are required to address Chapter 33 do so because they have applied for resource consent to clear indigenous vegetation, and the obligations set out in the RMA require protection (section 6(c)) and maintenance (section 31).

5.12 I recommend a new policy at 33.2.1.11 that is essentially a hybrid of the policies sought by Mr Brown in part 5 of his evidence. I therefore accept in part Mr Brown's submission because the recognition or

7 Trojan Helmet Limited (Submissions 443, 452, 437), Mount Cardrona Station Limited (407), Hogan Gully Farming Limited (456) Ayrburn Farm Estate Limited (430), Kawarau Jet Services Holdings Ltd (307), ZJV (NZ) Limited (343), Queenstown Wharves Limited (766), Mount Rosa Station Limited (377), Dalefield Trustees Limited (350), Skydive Queenstown Limited (122).

intent of the issue is accepted. However, I prefer the following phrasing because it is more consistent with the phrase used throughout Chapter 33. The recommended policy is:

> *Encourage opportunities through development to protect and enhance high quality indigenous vegetation and the rehabilitation of degraded indigenous vegetation communities.*

5.13 In addition, Mr Brown seeks that other activities than farming are recognised in Policy 33.2.2.3. I consider that the inclusion of 'recreational activities' is applicable and adds value because there are SNAs within existing and potential areas with recreational potential. Mr Brown seeks a policy that 'encourages land use practices that enable rehabilitation and pest control', under Objective 33.2.4 for Alpine Environments. If the Panel were to accept this policy, which I consider to be appropriate, I recommend that it is located in Objective 33.2.1 because pest control and rehabilitation is applicable in many areas and not just the Alpine Environment.

5.14 These changes are included in the recommended revised chapter in **Appendix 1** and a s32AA evaluation of the changes is attached at **Appendix 2**.

6. THE EFFICIENCY AND EFFECTIVENESS OF THE APPLICATION OF THE INDIGENOUS VEGETATION RULES

6.1 Part 33.3 of the Indigenous Vegetation Chapter provides guidance on how to apply the indigenous vegetation rules. Issue 1 of the section 32 evaluation report discusses the issues with the ODP rules and the importance of providing certainty. Forest and Bird (#706) and DOC (#373) both showed support for this method at the hearing, while JBIL (#784) and in particular it's planning witness, Mr Alan Cubitt, submitted that the rules did not advance certainty. Unhelpfully, Mr Cubitt did not provide any alternative methods. I consider that Mr Cubitt's evidence tabled and spoken to at the hearing appeared to be overly focused on the context of the identification of threatened

plants, the need for certainty for landowners and the nuisance of requiring an ecologist/botanist to identify these plants.

6.2 I consider that the method put forward in the PDP to apply the indigenous vegetation rules provides certainty and in many situations will be able to be applied confidently by 'laypeople'. The use of the 20% and 30% coverage thresholds provides a quantitative measure. These implementation methods could be removed, but then a landowner would have to include all and any indigenous vegetation within an area and this is not considered efficient. The 20% and 30% provide the ability for a landowner to exclude outliers. Examples were provided to the Panel, with the information filed on 16 May 2016, of such outliers that would not be included in the PDP rules.

6.3 At the hearing Mr Espie for JBIL considered that the method was flawed and suggested an alternative method to identify vegetation through different types of communities. Mr Espie referred to this as the tripartite or '1/3, 1/3, 1/3' method. In paragraph 3.56 of his evidence Mr Espie also cited an example of the flaws in using coverage by citing a situation where over time, a wilding conifer community became the dominant species. I consider that this is not an accurate critique of the application of the rules because the qualifiers in Rule 33.3 make it clear that the vegetation at issue is indigenous vegetation. Therefore I simply cannot see how citing wilding conifers is an appropriate example. Mr Espie also appeared to hold an incorrect assumption in that the need for a resource consent predetermined the outcome for any development.

6.4 With respect to Mr Espie, the need to obtain a resource consent does not predetermine the outcome and as noted in Issue 1 of the section 32 evaluation report, up until the *Royal Forest and Bird v Innes*[8] enforcement proceedings, it appeared that all resource consent applications had been granted and had been processed on a notified basis. A more recent resource consent for partial retrospective approval of indigenous vegetation with an acutely threatened land environment was also processed on a notified basis.[9]

8 *Royal Forest and Bird Society of New Zealand v Dougal Innes* [2014] NZEnvC 72.
9 Peter Phiskie RM140165.

6.5 I have sought clarification from the Council's ecologist Mr Davis, with respect to the notion suggested by Mr Espie of whether the tripartite, or '1/3, 1/3, 1/3' method he spoke to in the hearing has merit. Mr Davis has advised as follows:[10]

> *The problem with Dr Espie's proposal is that it provides no definition around what 'modified semi natural' vegetation constitutes indigenous vegetation. It also appears to promote a tiered approach to the assessment of ecological values and assumes 'modified semi natural' vegetation is not as valuable as vegetation that has a high degree of naturalness. This is not consistent with our understanding of ecological value, ignores the concept of ecosystem rarity and would not promote maintenance of the districts biodiversity. It is much better to provide a definition of indigenous vegetation (as set out in the PDP) and then undertake an assessment of ecological values on their merits.*

6.6 Overall, I consider that the methods in Part 33.3 that provide direction on whether the indigenous vegetation within an area 'qualifies' to be calculated is the most appropriate and will best serve to meet the purpose of the RMA.

7. BIODIVERSITY OFFSETTING

7.1 DOC (#373) seek that biodiversity offsetting is defined in the PDP, that the policy relevant to biodiversity offsetting under Objective 33.2.1 is modified, and a schedule is added to the PDP that provide guidance on the application of biodiversity offsetting.

7.2 In the s42a report I did not accept DOC's submission on this. Instead I accepted NZTM's (#519) submission that there are likely to be advances in biodiversity offsetting, and defining the term could lead to frustration at some point in the future life of the PDP. An example of this frustration is where a development proposal seeks to undertake biodiversity offsetting and is constrained by a definition that could have since been advanced.

10 See **Appendix 5** at section 3.

7.3 Having had the opportunity to consider the evidence of Mr Barea and Mr Deavoll for DOC, I sought advice from the Council's ecologist Mr Davis on the merits of this, Mr Davis has provided me with the following advice, with reference to the paragraph numbers of Mr Barea's primary evidence:[11]

> *Para. 47: I support the proposed alternative text for Policy 33.2.1.8, with a minor amendment to the first line, whereby 'significant indigenous vegetation or indigenous fauna' is reworded to 'indigenous biodiversity', to encompass all biodiversity values. The alternative policy provides a clear structure for managing the impacts of proposed activities within the District.*
>
> *Para. 49: I support the inclusion of the Biodiversity Offsets definition. It provides required clarity and understanding around Policy 33.2.1.8.*
>
> *Para. 50: if compensation is to be included in Policy 33.2.1.8, then I agree that the definition provided must be included in the Plan. However, I think that compensation should not be included because it does not align with the Objective (33.2.1) in that it does not require a measurable and long-term biodiversity improvement.*
>
> *Para. 51: I support the framework/schedule proposed. It provides clarity, understanding and consistency as to how biodiversity offsetting will operate within the District, while being in line with national guidance.*

7.4 I refer to and rely on the advice of Mr Davis in terms of the technical ecological merits of the requests by DOC. From a planning perspective, I am comfortable with the phrasing of the policy, its location within Chapter 33 under Objective 33.2.1, the definition, and the schedule. I also support the requested definitions of biodiversity

11 See **Appendix 5** at section 4.

offsetting (with Mr Davis's suggested amendment), no-net loss and environmental compensation as suggested by DOC. These changes are shown in the recommended revised chapter at **Appendix 1**.

7.5 As discussed in the planning reply for the Rural Chapter, I do not entirely agree with Mr Vivian for NZTM (#519) where NZTM seeks to use the phrase offsetting loosely for what appears to be more suited to environmental compensation for effects on other values, such as landscape or recreational values. With regard to this I refer to and accept Mr Barea's description of *'Compensation V Offsets'* in paragraph 32 of his evidence.

7.6 My understanding of Mr Barea's and Mr Deavoll's suggestion for a definition of environmental compensation is not so much to promote this method but to provide a clear distinction between 'compensation' and 'offsets'. I also consider that other environmental elements can be added to it without detracting from the key message emphasised by DOC. Another reason for this is that 'environmental compensation' could be applied more broadly across the PDP and not just to do with biodiversity. In addition, I agree with Mr Davis and do not recommend environmental compensation is included in a policy in the Indigenous Vegetation Chapter. However, I do note that this phrase is specified elsewhere in the Rural Chapter in a recommended policy to do with mineral extraction and in the Landscape Assessment matters.[12]

7.7 For these reasons I recommend a definition of 'environmental compensation' is added to the PDP. This is shown in the recommended revised chapter at **Appendix 1**.

8. ECOSYSTEM SERVICES

8.1 The Panel queried whether there was merit in including reference to ecosystem services. Ecosystem services is defined in Chapter 2 of the PDP as:

12 Refer to Recommended Policy 22.5.6 and Assessment Matters 21.7.3.3 (c) and (e).

Ecosystem Services	Are the resources and processes the environment provides that people benefit from (for example purification of water and air, pollination of plants and decomposition of waste).

8.2 I note that the QLDC's corporate submission (#383) seeks the definition is modified as follows:

Ecosystem Services	Ecosystem services are categorised as 'provisioning', such as food, timber and freshwater; 'regulating', such as air quality, climate and pest regulation; 'cultural' such as recreation and sense of belonging; and 'supporting', such as soil quality and natural habitat resistance to weeds.

8.3 Submitters Evan Alty (#339) and Forest and Bird (#706) seek that a reference to ecosystem services is made in the first paragraph to part 33.1 'Purpose Statement'. I did not support the inclusion of this phrase in the purpose statement because there were no corresponding provisions in the statutory components of the chapter.

8.4 If the Panel were of the view that this phrase should be included I suggest that it could be added to Policy 33.2.1.7 as indicated:

Policy 33.2.1.7 *Activities involving the clearance of indigenous vegetation are undertaken in a manner to ensure the District's indigenous biodiversity values and ecosystem services are protected, maintained or enhanced.*

8.5 I have not shown this in the recommended revised chapter at **Appendix A** as I continue to consider that it is inappropriate if there are no corresponding provisions in the statutory components of the chapter.

9. 'APPLICATION OF WATER' IN DEFINITION OF 'CLEARANCE OF INDIGENOUS VEGETATION'

9.1 JBIL (#784) submit that by including water in the definition of clearance, the section 32 evaluation report does not state the costs to farming associated with the definition of clearance of vegetation. I consider this is incorrect as the costs to farming are the same for any other element in the definition that restricts the clearance of

indigenous vegetation, such as cultivation or spraying with herbicide. The identification of water as a means of indigenous vegetation clearance is no different in effect on certain indigenous vegetation, than spraying with herbicide and resultant cultivation.

9.2 Including this activity in the definition of clearance provides certainty, as the definition has the phrase 'includes' and not 'means'. Therefore the activities specified are not exhaustive. It would lead to uncertainty if the application of water was removed because a landowner could be accused of clearance without knowing that this activity does have a clearance effect in certain circumstances.

9.3 I also refer to and rely on the section 32 evaluation report and evidence of Mr Davis on this matter. I recommend the definition is retained as notified.

10. OBJECTIVES AND POLICIES

10.1 Otago Fish and Game (#788) seeks an additional policy to manage the impacts of tussock removal and water yield in dry catchments and considers that there is not enough emphasis on streamside management, or trout and salmon. I note that trout and salmon are not indigenous species. While I understand the desire for management of streamside vegetation clearance, the Council's functions under s31 of the RMA and the Indigenous Vegetation Chapter do not manage the removal of exotic vegetation (except where identified as part of a habitat in the SNA schedule).

10.2 I do note however that there is a rule in the PDP that restricts indigenous vegetation clearance within 20m of a water body, in terms of riparian area protection overall. Overall, I consider the revised chapter is appropriate.

11. EXEMPTIONS FOR UTILITIES AND THE NATIONAL GRID

11.1 Transpower (#805) has sought an exemption from the indigenous vegetation clearance rules in SNAs, if it relates to the operation, upgrade and maintenance of the National Grid. Not only does this

relief raise interpretation issues in terms of the application of the National Environmental Standards for Electricity Transmission Activities (**NESETA**), it also raises an interesting proposition – that an SNA is a natural area for some purposes, but not others.

11.2 I accept that an outcome that requires Transpower to obtain consent for this activity would be an anomaly when compared to the position of other utilities.

11.3 However, the matter at issue is that the NESETA trumps a district plan and in this instance any clearance within SNA F40A would require a restricted discretionary activity resource consent pursuant to Regulation 32 (1)(a)(i) of the NESETA. I otherwise refer to the Legal Right of Reply, on this matter.

12. NON-COMPLYING ACTIVITY STATUS FOR INDIGENOUS VEGETATION CLEARANCE

12.1 Both DOC (#373) and Forest and Bird (#706) seek that a non-complying status is included for clearance within SNAs. On the face of the reasons sought, I agree. However I am concerned that there could be unintended disparity created between scheduled SNAs that are identified on the Planning Maps and in Schedule 33.8, and areas that are identified as significant through the assessment of development proposals and the application of the Significance Criteria in policy 33.2.1.10.

12.2 Such a scenario could be that where indigenous vegetation is identified as being significant through a resource consent application, there is an assumption, or a case argued by proponents that because the indigenous vegetation is significant, but had not previously been identified by the Council, and the activity status is discretionary, that it is an easier path for approval. Or, alternatively, that by a pervasive coupling of activity status the significant (but not scheduled) indigenous vegetation is not important because the activity status is not non-complying.

12.3 While I acknowledge that this perspective is based on a rather negative view of a case that could be put forward by a proponent, I consider that it is more appropriate to keep the activity status at discretionary. I consider that the policy framework is sufficiently robust to protect areas of significance, both scheduled areas and those that are not, where this is necessary.

12.4 For these reasons I consider that the activity status for clearance of SNA's should be discretionary as notified.

13. SCHEDULED SNA AREAS

13.1 I refer to and rely on Mr Davis evidence attached as an appendix to the s42a report that the recommendations on the SNAs should be retained.

14. CONCLUSION

14.1 Overall, I consider that the revised chapter as set out in **Appendix 1** is the most appropriate way to meet the purpose of the RMA.

Craig Barr
Acting Policy Planning Manager
3 June 2016

APPENDIX 1

33 INDIGENOUS VEGETATION AND BIODIVERSITY REVISED CHAPTER

INDIGENOUS VEGETATION & BIODIVERSITY 33

Key:

Red underlined text for additions and ~~red strike through~~ text for deletions, Appendix 1 to Craig Barr's Right of Reply, dated 3 June 2016.

Purple underlined text for additions and ~~purple strike through~~ text for deletions, Working Draft in response to the Panel's Fourth Procedural Minute, dated 13 April 2016.

Black underlined text for additions and ~~black strike through~~ text for deletions, Appendix 1 to Craig Barr's s42A report, dated 7 April 2016.

33 Indigenous Vegetation and Biodiversity

33.1 Purpose

The District contains a diverse range of habitats that support indigenous plants and animals. Many of these are endemic, comprising forests, shrubland, herbfields, tussock grasslands, wetlands, lake and river margins. Indigenous biodiversity is also an important component of ecosystem services and the District's landscapes.

Comment [CB1]: Submitter 706

The Council has a responsibility to maintain indigenous biodiversity and to recognise and provide for the protection of significant indigenous vegetation and significant habitats of indigenous fauna, which are collectively referred to as Significant Natural Areas (SNAs).

Activities ~~involving the efficient use of land~~ including ski-field development within identified Ski Area Sub Zones, farming, fence, road and track construction can be reasonably expected to be undertaken providing such activities maintain or enhance the District's indigenous biodiversity values.

Comment [CB2]: Submitter 706 and 373.

The limited ~~removal~~ clearance of indigenous vegetation is permitted, with discretion applied through the resource consent process to ensure that indigenous vegetation clearance activities exceeding the permitted limits protect, maintain or enhance indigenous biodiversity values. Where the ~~removal~~ clearance of indigenous vegetation would have significant residual effects after avoiding, remedying or mitigating adverse effects ~~cannot be avoided or mitigated and would diminish the District's indigenous biodiversity values~~, opportunities for biodiversity offsetting ~~the enhancement of other areas~~ are encouraged ~~to offset the adverse effects of the loss of those indigenous biodiversity values~~.

Comment [CB3]: Grammatical consistency.

Comment [CB4]: Submitter 373.

Alpine environments are identified as areas above 1070m and are among the least modified environments in the District. Due to thin and infertile soils and severe climatic factors, establishment and growth rates in plant life are slow, and these areas are sensitive to modification. In addition, because these areas contribute to the District's distinctive landscapes, and are susceptible to exotic pest plants, changes to vegetation at these elevations may be conspicuous and have significant effects on landscape character and indigenous biodiversity.

The District's lowlands comprising the lower slopes of mountain ranges and valley floors have been modified by urban growth, farming activities and rural residential development. Much of the indigenous vegetation habitat has been removed and these areas are identified in the Land Environments of New Zealand Threatened Environment Classification as either acutely or chronically threatened environments, having less than 20% indigenous vegetation remaining.

Pursuant to Section 86(b)(3) of the RMA, the rules applicable to Significant Natural Areas have immediate legal effect.

33.2 Objectives and Policies

33.2.1 **Objective – ~~The P protection, maintain maintenance and enhancement of i~~ Indigenous biodiversity is protected maintained and enhanced.**

Comment [CB5]: Grammar to make the statement more outcomes / goal focused.

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Policies

33.2.1.1 Identify the District's Significant Natural Areas and schedule them in the District Plan, including the ongoing identification of Significant Natural Areas through ~~resource consent applications~~ development proposals, using the criteria set out in Policy 33.2.1.9~~10~~.

Comment [CB6]: Clarity.

33.2.1.2 Identify the District's rare or threatened indigenous species and schedule them in the District Plan to assist with the management of their protection.

33.2.1.3 Provide standards in the District Plan for indigenous vegetation that is not identified as a Significant Natural Area or threatened species, which are practical to apply and that permit the ~~removal~~ clearance of a limited area of indigenous vegetation.

Comment [CB7]: grammar

33.2.1.4 ~~Recognise~~ Have regard to and take into account the values of tangata whenua and kaitiakitanga.

Comment [CB8]: Grammar

33.2.1.5 ~~Recognise~~ Have regard to anticipated activities in rural areas such as farming or Ski Area Activities within the Ski Area Sub Zones ~~and the efficient use of land and resources while having regard to the maintenance, protection or enhancement of~~ while avoiding, remedying or mitigating the adverse effects of clearance on indigenous biodiversity values.

Comment [CB9]: Grammar

Comment [CB10]: Submitter 706.

33.2.1.6 Encourage the long-term protection of indigenous vegetation and in particular Significant Natural Areas by encouraging land owners to consider non-regulatory methods such as open space covenants administered under the Queen Elizabeth II National Trust Act.

33.2.1.7 Activities involving the clearance of indigenous vegetation are undertaken in a manner to ensure the District's indigenous biodiversity values are protected, maintained or enhanced.

33.2.1.8 ~~Where the adverse effects of an activity on indigenous biodiversity values cannot be avoided, remedied or mitigated, consideration will be given to whether there has been any compensation or biodiversity offset proposed and the extent to which any offset will result in no net loss and preferably, a net indigenous biodiversity gain.~~

Comment [CB11]: Submitter 373

Manage the effects of activities on indigenous biodiversity by:

a) avoiding as far as practicable and, where total avoidance is not practicable, minimising adverse effects

b) requiring remediation where adverse effects cannot be avoided

c) requiring mitigation where adverse effects on the areas identified above cannot be avoided or remediated

d) requiring any residual adverse effects on significant indigenous vegetation or indigenous fauna to be offset through protection, restoration and enhancement actions that achieve no net loss and preferably a net gain in indigenous biodiversity values having particular regard to;

i. limits to biodiversity offsetting due the affected biodiversity being irreplaceable or vulnerable;

ii. the ability of a proposed offset to demonstrate it can achieve no net loss or preferably a net gain;

iii. Schedule 33.10 on Biodiversity Offsets

e) enabling any residual adverse effects on other indigenous vegetation or indigenous fauna to be offset through protection, restoration and enhancement actions that achieve no net loss and preferably a net gain in indigenous biodiversity values having particular regard to;

i. the ability of a proposed offset to demonstrate it can achieve no net loss or preferably a net gain;

ii. Schedule 33.10 on Biodiversity Offsets

33.2.1.9 Protect the habitats of indigenous animals and in particular birds in wetlands, beds of rivers and lakes and their margins for breeding, roosting, feeding and migration.

Comment [CB12]: Submitter 706

33.2.1.~~9~~10 Assess the nature and scale of the adverse effects of indigenous vegetation clearance on the District's indigenous biodiversity values by applying the following criteria:

a. **Representativeness**

Whether the area is an example of an indigenous vegetation type or habitat that is representative of that which formerly covered the Ecological District:

OR

Comment [CB13]: Submitter 706

b. **Rarity**

Whether the area supports;

- indigenous vegetation and habitats within originally rare ecosystems;
- indigenous species that are threatened, at risk, uncommon, nationally or within the ecological district;
- indigenous vegetation or habitats of indigenous fauna that has been reduced to less than 20% of its former extent, regionally or within a relevant Land Environment or Ecological District.

OR

c. **Diversity and Pattern**

Comment [CB14]: Submitter 706

Whether the area supports a highly diverse assemblage of indigenous vegetation and habitat types, and whether these have a high indigenous biodiversity value, including:~~-~~

- indigenous taxa;
- ecological changes over gradients.

Comment [CB15]: Submitter 706

OR

d. **Distinctiveness**

Whether the area supports or provides habitats for indigenous species:

- at their distributional limit within Otago or nationally;
- are endemic to the Otago region,
- are distinctive, of restricted occurrence or have developed as a result of unique environmental factors.

OR

e. **Ecological Context**

The relationship of the area with its surroundings, including whether the area proposed to be cleared:

- has important connectivity value allowing dispersal of indigenous fauna between different areas;

- has an important buffering function to protect values of an adjacent area of feature;
- is important for indigenous fauna during some part of their life cycle.

33.2.1.11 Encourage opportunities through development to protect and enhance high quality indigenous vegetation and the rehabilitation of degraded indigenous vegetation communities.

Comment [CB16]: J Brown 608 et. al

33.2.2 Objective – ~~The P protection and enhancement of~~ Significant Natural Areas are protected maintained and enhanced.

Comment [CB17]: Grammar

Policies

33.2.2.1 Avoid the clearance of indigenous vegetation within Significant Natural Areas including those that meet the criteria in Policy 33.2.1.10 that would reduce indigenous biodiversity values.

Comment [CB18]: Submitter 706, Cross referencing.

33.2.2.2 Allow the clearance of indigenous vegetation within Significant Natural Areas only in exceptional circumstances and ensure that clearance is undertaken in a manner that retains the indigenous biodiversity values of the area ~~in circumstances where these activities will have a low impact or offer compensation commensurate to the nature and scale of the clearance~~.

Comment [CB19]: clarification

Comment [CB20]: Submitters 373, 706, 600.

33.2.2.3 ~~Recognise that t~~The majority of Significant Natural Areas are located within land used for farming activity or recreational areas and provide for small scale, low impact indigenous vegetation removal, stock grazing, the construction of fences and small scale farm tracks, and the maintenance of existing fences and tracks.

Comment [CB21]: Grammar

Comment [CB22]: Submitter 806 et. al

33.2.3 Objective – ~~Ensure the efficient use of land, including ski-field development, farming activities and infrastructure improvements, do not reduce the District's~~ Land use and development maintains indigenous biodiversity values.

Comment [CB23]: Objective 33.2.3 and Policies 33.2.3.1 to 33.2.3.7: Submitters 706, 373 and 806.

Policies

33.2.3.1 ~~Provide standards controlling t~~The clearance of indigenous vegetation within ~~20 meters~~ the margins of water bodies~~, and ensure that proposals for clearance~~ does not create erosion, or reduce natural character and indigenous biodiversity values.

33.2.3.2 ~~Where the permanent removal of indigenous vegetation is proposed, e~~Encourage opportunities to remedy adverse effects through the retention, rehabilitation or ~~establishment~~ protection of the same indigenous vegetation community elsewhere on the site.

33.2.3.3 Encourage the retention and enhancement of indigenous vegetation including in locations that have potential for regeneration, or provide stability, and particularly where productive values are low, or in riparian areas or gullies.

~~33.2.3.4 When considering the effects of proposals for the clearance of indigenous vegetation, have particular regard to whether threatened species are present, or the area to be cleared is within a land environment (defined by the Land Environments of New Zealand at Level IV) identified as having less than 20% indigenous vegetation remaining; and,~~

~~33.2.3.5 Where indigenous vegetation clearance is proposed within an environment identified as having less than 20% indigenous vegetation remaining (defined by the Land Environments of New Zealand at Level IV), have regard to the threatened environment status, the nature and scale of the clearance, potential for recovery or the merit of any indigenous biodiversity offsets.~~

33.2.3.4 Have regard to whether the area to be cleared is within a chronically or acutely threatened land environment (defined by the Land Environments of New Zealand at Level IV), and the degree to which the clearance would maintain indigenous biodiversity, using the criteria in Policy 33.2.1.10.

~~33.2.3.6~~ ~~Ensure indigenous vegetation removal does not adversely affect the natural character of the margins of water ways.~~

33.2.3.~~6~~5 Have regard to any areas in the vicinity of the indigenous vegetation proposed to be cleared, that constitute the same habitat or species which are protected by covenants or other formal protection mechanisms.

33.2.4 Objective – ~~Protect the i~~Indigenous biodiversity and landscape values of alpine environments are protected from the effects of vegetation clearance and exotic tree and shrub planting.

Policies

33.2.4.1 ~~Recognise that~~ The alpine environments contribute to the distinct indigenous biodiversity and landscape qualities of the District, ~~and~~ are vulnerable to change and require protection from vegetation clearance or establishment of exotic plants.

Comment [CB24]: Grammar.

Comment [CB25]: Submitter 706 and FS1340

33.2.4.2 Protect the alpine environment from degradation due to planting and spread of exotic species.

33.3 Other Provisions and Rules

33.3.1 District Wide

Attention is drawn to the following District Wide chapters. All provisions referred to are within Stage 1 of the Proposed District Plan, unless marked as Operative District Plan (ODP).

1 Introduction	2 Definitions	3 Strategic Direction
4 Urban Development	5 Tangata Whenua	6 Landscapes
24 Signs (18 ODP)	25 Earthworks (22 ODP)	26 Historic Heritage
27 Subdivision	28 Natural Hazards	29 Transport (14 ODP)
30 Utilities and Renewable Energy	31 Hazardous Substances (16 ODP)	32 Protected Trees
34 Wilding Exotic Trees	35 Temporary Activities and Relocated Buildings	36 Noise
37 Designations	Planning Maps	

33.3.2 Clarification

33.3.2.1 Compliance with any of the following standards, in particular the permitted standards, does not absolve any commitment to the conditions of any relevant land use consent, consent notice or covenant registered on the site's computer freehold register.

33.3.2.2 Where an activity does not comply with a Standard listed in the Standards table, the activity status identified by the 'Non-Compliance Status' column shall apply. Where an activity breaches more than one Standard, the most restrictive status shall apply to the Activity.

33.3.2.3 The rules apply to all zones in the District, including formed and unformed roads, whether zoned or not.

33.3.2.4 Refer to part 33.7 for the schedule of threatened species.

33.3.2.5 Refer to the planning maps and part 33.8 for the schedule of Significant Natural Areas.

33.3.2.6 Refer to Part 33.9 for the District's land environment (defined by the Land Environments of New Zealand at Level IV) that has 20 percent or less remaining in indigenous cover.

33.3.2.7 Refer to the Landcare Research Threatened Environment Classification: http://www.landcareresearch.co.nz/__data/assets/pdf_file/0007/21688/TECUserGuideV1_1.pdf

33.3.2.8 The following abbreviations are used in the tables. Any activity that is not permitted (P) or prohibited (PR) requires resource consent.

P	Permitted	C	Controlled
RD	Restricted Discretionary	D	Discretionary
NC	Non Complying	PR	Prohibited

33.3.3 Rules: Application of the indigenous vegetation rules

33.3.3.1 For the purposes of determining compliance with the ~~R~~rules in Tables 1 to 4 ~~33.4.1 to 33.4.3~~, indigenous vegetation shall be measured cumulatively over the area(s) to be cleared.

33.3.3.2 Rules 33.5.1 to 33.5.4 shall apply where indigenous vegetation attains 'structural dominance' and, the indigenous vegetation exceeds 20% of the total area to be cleared or total number of species present of the total area to be cleared.

33.3.3.3 Rules 33.5.1 to 33.5.4 shall apply where indigenous vegetation does not attain structural dominance and exceeds 30% of the total area to be cleared, or total number of species present of the total area to be cleared.

33.3.3.4 Structural dominance means indigenous species that are in the tallest stratum.

33.3.3.5 Requirements (33.3.3.2) and (33.3.3.3), do not apply to threatened species listed in Schedule 33.7, the clearance of a threatened species applies to any single plant.

33.3.3.6 Requirements (33.3.3.2) and (33.3.3.3), do not apply to Significant Natural Areas listed in Schedule 33.8. Any clearance or activity is applicable to the land identified as a Significant Natural Area and identified in the planning maps.

33.3.4 Rules: Exemptions

33.3.4.1 Any area identified in the District Plan maps and scheduled as a Significant Natural Area that is, or becomes protected by a covenant under the Queen Elizabeth II National Trust Act, shall be removed from the schedule and be exempt from rules in Table 3.

33.3.4.2 Indigenous vegetation clearance for the operation and maintenance of existing and in service/operational roads, tracks, drains, utilities, structures and/or fence lines, but excludes their expansion.

33.3.4.3 Indigenous vegetation clearance for the construction of walkways or trails up to 1.5 metres in width provided that it does not involve the clearance of any threatened plants listed in section 33.7 or any tree greater than a height of 4 metres.

33.3.4.4 Indigenous vegetation clearance within the Ski Area Sub Zones on land administered under the Conservation Act 1987 is exempt from the rules in Tables 1 to 4 where the

relevant approval has been obtained from the Department of Conservation, providing that:

(a) The indigenous vegetation clearance does not exceed the approval by the Department of Conservation;

(b) Prior to the clearance of indigenous vegetation, persons shall provide to the Council the relevant application and the approval from the Department of Conservation; and,

(c) The Council is satisfied that the application information submitted to the Department of Conservation adequately identifies the indigenous vegetation to be cleared and the effects of the clearance.

33.4 Rules – Clearance of Indigenous Vegetation

Table 1	**Any activity involving the clearance of indigenous vegetation, earthworks within SNA's and the planting of exotic plant species shall be subject to the following rules:**	~~Non-Compliance~~ **Activity Status**
33.4.1	Activities that comply with the Standards in Tables 2 to 4.	P
~~**33.4.1**~~	~~The clearance of indigenous vegetation complying with all the standards in Table 2 shall be a permitted activity.~~	~~D~~
33.4.2	~~Activities located within Significant Natural Areas that comply with all the standards in Table 3 shall be a permitted activity.~~	~~D~~
33.4.3	~~Activities located within alpine environments (any land at an altitude higher than 1070m above sea level) that comply with Table 4 shall be a permitted activity.~~	~~D~~

Comment [CB26]: Note: The recommended amendments that are not referenced by a submission are suggested amendments to assist with clarity as suggested by the panel. The recommended amendments do not make any substantive changes to the rules.

33.5 Rules - Standards for Permitted Activities

Table 2	**Clearance of indigenous vegetation not located within a Significant Natural Area or within Alpine Environments:**	**Non - Compliance**
33.5.1	Where indigenous vegetation is less than 2.0 meters in height: In any continuous period of 5 years the maximum area of indigenous vegetation that may be cleared is limited to: 33.5.1.1 500m² on sites that have a total area of 10ha or less; and 33.5.1.2 5000m² on any other site. ~~Clearance is less than 5000m² in area of any site and, 500m² in area of any site less than 10ha, in any continuous period of 5 years.~~	D
33.5.2	Where indigenous vegetation is greater than 2.0 metres in height: In any continuous period of 5 years the maximum area of indigenous vegetation that may be cleared is limited to: 33.5.2.1 50m² on sites that have a total area of 10ha or less; and 33.5.2.2 500m² on any other site. ~~, clearance is less than 500m² in area of any site and, and 50m² in area~~	D

	~~of any site less than 10ha, in any continuous period of 5 years.~~	
33.5.3	Where indigenous vegetation is located within a chronically or acutely threatened land environment identified in Part 33.9: In any continuous period of 5 years the maximum area of indigenous vegetation that may be cleared is limited to: 33.5.3.1 50m² on sites that have a total area of 10ha or less; and 33.5.3.2 500m² on any other site. ~~Within a land environment (defined by the Land Environments of New Zealand at Level IV) that has 20 percent or less remaining in indigenous cover, clearance is less than 500m² in area of any site and, 50m² in area of any site less than 10ha, in any continuous period of 5 years (refer to section 33.9).~~	D
33.5.4	Clearance of indigenous vegetation ~~is more than~~ shall not occur within 20m ~~from~~ of the bed of a water body.	D
33.5.5	Clearance of indigenous vegetation ~~I~~ is for the clearance of indigenous trees that have been windthrown and/or are dead standing as a result of natural causes and have become dangerous to life or property.	P
33.5.6	~~Is not the clearance of a~~ Any plant identified as a threatened species listed in section 33.7 shall not be cleared.	D

Table 3	**Activities within Significant Natural Areas identified in Schedule 33.8 and on the District Plan maps:**	**Non - Compliance**
33.5.7	Earthworks shall: 33.5.7.1 be less than 50m² in any one hectare in any continuous period of 5 years; 33.5.7.2 not be undertaken on slopes with an angle greater than 20º.	D
33.5.8	The clearance of indigenous* vegetation shall not exceed 50m² in area in any continuous period of 5 years. *With the exception of specified indigenous animal habitat within exotic vegetation.	D
33.5.9	~~Does not involve the~~ There shall be no planting of any exotic species ~~tree or shrub planting~~.	D

Table 4	**Activities within Alpine Environments – land higher than 1070 metres above sea level:**	**Non - Compliance**
33.5.10	~~Does not involve the clearance of~~ The following rules apply to any land that is higher than 1070 meters above sea level: 33.5.10.1 indigenous vegetation shall not be cleared; ~~,~~ 33.5.10.2 ~~or the planting of shelterbelts, or any~~ exotic species shall not be planted ~~tree or shrub planting~~.	D

Comment [CB27]: Submitter 706.

Comment [CB28]: Submitter 706. Policy 33.2.1.9 and clarification.

Comment [CB29]: Submitter 706

Comment [CB30]: Submitter 706

	Clarification: For the purpose of the clearance of indigenous vegetation by way of burning, the altitude limit of 1070 metres shall mean the average maximum altitude of any land to be burnt, averaged over north and south facing slopes	

33.6 Rules - Non-Notification of Applications

The provisions of the RMA apply in determining whether an application needs to be processed on a notified basis. No activities or non-compliances with the standards in this chapter have been identified for processing on a non-notified basis.

33.7 Threatened Plant List

33.7.1 Identification of Threatened Plants

Assistance with the identification of threatened plants is available through the New Zealand Plant Conservation Networks' website: http://www.nzpcn.org.nz/default.aspx.

Scientific name	**Family**	**Location** **(Does not preclude location in any other areas)**
Threatened - Nationally Critical		
Pseudognaphalium ephemerum	Asteraceae	North Von
Triglochin palustris	Juncaginaceae	Upper Shotover, Moke Lake
Dysphania pusila (locally extinct?)		
Cardamine (b) CHR3129947; tarn)		
Cardamine (c) CHR511706		
Chaerophyllum colensoi var. delicatula		
Crassula peduncularis (locally extinct?)		
Epilobium pictum		
Threatened - Nationally Endangered		
Carex uncifolia	Cyperaceae	
Crassula multicaulis	Crassulaceae	
Leonohebe cupressoides	Plantaginaceae	Shotover key population, Wye, Deep Creek, Bullendale
Lepidium sisymbrioides	Brassicaceae	Kawarau
Myosurus minimus subsp. novae-zelandiae	Ranunculaceae	Crown Range
Olearia hectorii	Asteraceae	Lake Dispute, McKinlays Creek
Pittosporum patulum	Pittosporaceae	Dingle Burn

Comment [CB31]: Submitter 373

Scientific name	Family	Location (Does not preclude location in any other areas)
Uncinia strictissima	Cyperaceae	Kingston
Centipeda minima ssp. minima		
Euchiton ensifer		
Ranunculus brevis		
Trithuria inconspicua		
Threatened - Nationally Vulnerable		
Anogramma leptophylla	Pteridaceae	Annual fern, Mt. Alta area Wanaka
Carmichaelia crassicaulis var. racemosa	Fabaceae	
Carmichaelia juncea	Fabaceae	Recorded by McCaskill 1999, Makarora
Carmichaelia kirkii	Fabaceae	Cardrona Valley, West Matukituki
Isolepis basillaris	Cyperaceae	
Kirkianella novae-zelandiae	Asteraceae	Shotover
Myosotis brevis	Boraginaceae	
Myosotis glauca	Boraginaceae	Nevis
Olearia fimbriata	Asteraceae	Hawea, Loch Linnhe
Pachycladon cheesemanii	Brassicaceae	Wye, Bobs Cove, Kingston
Senecio dunedinensis	Asteraceae	Cliffs
Carex cirrhosa		
Carex rubicunda		
Daucus glochidiatus		
Geranium retrorsum		
Gratiola concinna		
Mazus novaezeelandiae		
Myosotus glauca Ranunculus ternatifolius		
At Risk - Declining		
Acaena buchananii	Rosaceae	
Alepis flavida	Lorantheaceae	Sunshine Bay
Carex tenuiculmis	Cyperaceae	
Carmichaelia crassicaulis subsp. crassicaulis	Fabaceae	
Carmichaelia uniflora	Fabaceae	Caples Valley

Comment [CB32]: Submitter 373

Comment [CB33]: Submitter 373

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Scientific name	**Family**	**Location** **(Does not preclude location in any other areas)**
Carmichaelia vexillata	Fabaceae	
Coprosma intertexta	Rubiaceae	
Coprosma virescens	Rubiaceae	
Deschampsia caespitosa	Poaceae	
Luzula celata	Juncaceae	Shotover
Mentha cunninghamii	Lamiaceae	
Myosotis pygmaea	Boraginaceae	
Olearia fragrantissima	Asteraceae	Kingston
Olearia lineata	Asteraceae	
Peraxilla colensoi	Loranthaceae	
Peraxilla tetrapetala	Loranthaceae	
Pimelea aridula	Thymelaeaceae	
Pimelea sericeovillosa var pulvinaris	Thymelaeaceae	
Ranunculus piliferus	Ranunculaceae	
At Risk - Naturally Uncommon		
Achnatherum petriei	Poaceae	
Aciphylla dissecta	Apiaceae	Alpine
Aciphylla lecomtei	Apiaceae	Alpine
Aciphylla montana var. gracilis	Apiaceae	Alpine
Aciphylla spedenii	Apiaceae	Alpine.
Agrostis petriei	Poaceae	
Anemone tenuicaulis	Ranunculaceae	
Anisotome cauticola	Apiaceae	
Anisotome lanuginosa	Apiaceae	Alpine
Anthosachne aprica	Poaceae	
Anthosachne falcis	Poaceae	
Carex allanii	Cyperaceae	
Carex berggrenii	Cyperaceae	
Carex capillacea	Cyperaceae	
Carex carsei	Cyperaceae	
Carex edgarae	Cyperaceae	

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Scientific name	Family	Location (Does not preclude location in any other areas)
Carex lachenallii subsp. parkeri	Cyperaceae	Alpine
Carex pterocarpa	Cyperaceae	Alpine
Carmichaelia compacta	Fabaceae	Kawarau- Cromwell Gorge endemic
Celmisia graminifolia	Asteraceae	
Celmisia philocremna	Asteraceae	Alpine Eyre Mt endemic
Celmisia spedenii	Asteraceae	Alpine Eyre Mt endemic
Celmisia thomsonii	Asteraceae	Alpine Eyre Mt endemic
Chionochloa crassiuscula subsp. torta	Poaceae	Alpine
Chionochloa crassiuscula subsp. crassiuscula	Poaceae	Alpine
Chionochloa vireta	Poaceae	Alpine
Chionohebe glabra	Plantaginaceae	Alpine
Colobanthus brevisepalus	Caryophyllaceae	
Deschampsia pusilla	Poaceae	Alpine
Epilobium margaretae	Onagraceae	Alpine
Epilobium purpuratum	Onagraceae	Alpine
Euchiton paludosus	Asteraceae	
Euchiton polylepis	Asteraceae	
Festuca mathewsii subsp. pisamontis	Poaceae	Alpine Pisa
Geranium microphyllum	Geraniaceae	
Gingidia baxterae	Apiaceae	
Hebe annulata	Plantaginaceae	Alpine Wye
Hebe biggarii	Plantaginaceae	
Hebe dilatata	Plantaginaceae	Alpine
Hebe pimelioides subsp. faucicola	Plantaginaceae	Kawarau Gorge. Endemic
Lagenifera barkeri	Asteraceae	
Leptinella albida	Asteraceae	Alpine
Leptinella serrulata	Asteraceae	
Libocedrus plumosa	Cupressaceae	East Matukituki, Siberia both Mt Aspiring National Park
Luzula leptophylla	Juncaceae	
Luzula traversii var. tenuis	Juncaceae	

Scientific name	Family	Location (Does not preclude location in any other areas)
Myosotis goyenii	Boraginaceae	Alpine. Endemic
Myosotis tenericaulis	Boraginaceae	
Ourisia confertifoila	Plantaginaceae	Alpine. Eyre Mt endemic
Ourisia remotifolia	Plantaginaceae	Alpine. Eyre Mt endemic
Ourisia spathulata	Plantaginaceae	Alpine. Eyre Mt endemic
Pachycladon wallii	Brassicaceae	Alpine
Pimelea poppelwellii	Thymelaeaceae	Alpine. Eyre Mt endemic
Plantago obconica	Plantaginaceae	Alpine. Hector Mts, Cardrona
Plantago triantha	Plantaginaceae	
Poa incrassata	Poaceae	Alpine
Poa pygmaea	Poaceae	Alpine
Poa senex	Poaceae	Alpine
Poa sudicola	Poaceae	Alpine
Pseudopanax ferox	Araliaceae	
Ranunculatus maculatus	Ranunculaceae	
Ranunculua scrithalis	Ranunculaceae	Alpine. Eyre Mt endemic
Raoulia beauverdii	Asteraceae	
Raoulia goyenii	Asteraceae	Alpine
Raoulia hectorii var. mollis	Asteraceae	Alpine. Remarkables
Uncinia elegans	Cyperaceae	
Uncinia purpurata	Cyperaceae	Alpine
Uncinia viridis	Cyperaceae	
Urtica aspera	Urticaceae	Wye Creek
Data Deficient		
Agrostis imbicilla	Poaceae	
Agrostis pallescens	Poaceae	
Brachyscome longiscapa	Asteraceae	Alpine. Remarkables
Brachyscome montana	Asteraceae	Alpine. Remarkables
Carex decurtata	Cyperaceae	
Coprosma brunnea	Rubiaceae	
Epilobium elegans	Onagraceae	

Scientific name	Family	Location (Does not preclude location in any other areas)
Epilobium insulare	Onagraceae	
Myosotis glabrescens	Boraginaceae	
Poa xenica	Poaceae	
Ranunculus macropus	Ranunculaceae	Lake Dispute

33.8 Schedule of Significant Natural Areas

33.8.1 ~~Significant Natural Areas~~

Identifier	Map Number	SNA Site Name	Property or location Reference	Description/Dominant Indigenous Vegetation
A10C	9	SNA C Mount Alfred Faces	Mt Earnslaw Station, Glenorchy	Mixed beech forest, montane and sub-alpine shrubland and sub-alpine short tussock land.
A8A	12	SNA A Fan Creek Shrublands	Mt Creighton Station	Grey shrubland. Old matagouri with *Olearia odorata*, *Coprosma propinqua*, *Aristotelia fruticosa*, *Carmichaelia petriei* and briar.
A8B	12	SNA B Lake Face Shrublands	Mt Creighton Station	Broadleaf indigenous hardwood community. Common species within this community include: *Griselinia littoralis*, Olearia spp., cabbage tree, Pseudopanax sp., marble leaf and Coprosma spp..
A8C	9, 10, 12, 13	SNA C Sites 1 to 9 Manuka Shrublands	Mt Creighton Station	Extensive shrublands of manuka.
A8D	12	SNA D Moke Creek Wetland	Mt Creighton Station	Wetland marsh.
A23A	12, 38	SNA A	Closeburn	Shrubland dominated by manuka and *Coprosma propinqua*.
B3A	8	SNA A	Mt Burke Station	Shrubland consisting of kanuka (*Kunzea ericoides*), manuka (*Leptospermum scoparium*), matagouri (*Discaria toumatou*), kowhai (Sophora sp.) and briar (*Rosa rubiginosa*).
B3B	8, 18	SNA B	Mt Burke Station	Woodland dominated by kanuka, but also contains a stand of halls totara (*Podocarpus cunninghamii*) on rubbly slopes at the head of the catchment and kowhai (Sophora sp.) in the upper kanuka forest.
B3C	8	SNA C	Mt Burke Station	Woodland dominated by halls totara (*Podocarpus cunninghamii*) and mountain toatoa (*Phyllocladus alpinus*).
B11A	4	SNA A Sites 1 to 2 Estuary Burn	Minaret Station	Kanuka woodland with a minor component of matagouri and mingimingi.

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Identifier	Map Number	SNA Site Name	Property or location Reference	Description/Dominant Indigenous Vegetation
B11C	4	SNA C Sites 1 to 6 Bay Burn	Minaret Station	Kanuka dominated woodland with a minor component of matagouri and mingimingi and regenerating broadleaved species.
B11D	4, 7	SNA D Minaret Burn	Minaret Station	Shrubland mosaic consisting of manuka/kanuka woodland and broadleaved indigenous hardwoods and beech forest.
B11F	4	SNA F Minaret Bay Riparian	Minaret Station	Indigenous broadleaved hardwoods.
B15A	4, 5	SNA A Sites 1 to 3 Mt Albert Burn & Craigie Burn Kanuka Woodlands	Mt Albert Station	Lakeshore fan communities - dense kanuka forest on flat river fans where the Craigie Burn and Albert Burn flow into the lake. The wet flats on the north side of the Albert Burn contain an excellent population of *Olearia lineata* growing along a small stream.
B15B	2, 5	SNA B Sites 1 to 5 Lake face shrublands and forest	Mt Albert Station	Beech forest remnants in several gullies and spreading onto some adjacent rolling country and generally surrounded by regenerating manuka shrubland.
B16A	8	SNA A Long Valley Creek	Glen Dene Station	Shrubland mosaic consisting of manuka woodland, broadleaved indigenous hardwoods and beech forest.
B16B	5	SNA B Sites 1 to 3 Lake Wanaka Shrublands	Glen Dene Station	Shrubland mosaic consisting of manuka woodland, broadleaved indigenous hardwoods and beech forest.
C14A	13, 13a	SNA A Sites 1 to 5 Remarkables Face SNA	Remarkables Station	Remnant broadleaf forest forming a buffer to Wye Creek and a good representation of sub-alpine shrubland occurring on several of the south faces of the steep spurs descending from the west faces of the Remarkables, as well as remnant totara logs.
C24A	13	SNA A Wye Creek SNA	Lake Wakatipu Station	Shrubland dominated by bracken fern and *Pittosporum tenuifolium*, but also including tutu, *Coprosma propinqua*, *Griselinia littoralis*, manuka, *Hebe salicifolia*, matagouri, mistletoe sp., Carmichaelia sp., and *Cordyline australis*.
D1A	13	SNA A	Loche Linnhe Station	Grey shrubland consisting of *Olearia odorata, Olearia fimbriata, Discaria toumatou, Coprosma propinqua, Coprosma rugosa, Melicytus alpinus, Muehlenbeckia complexa,* and *Rubus schmidelioides*.
D1B	13	SNA B Sites 1 to 3	Loche Linnhe Station	Forest and shrubland consisting of *Griselinia littoralis, Aristotelia serrata, Olearia arborescens, Metrosideros umbellata, Carpodetus serratus, Fuschia excorticata, Sophora microphylla, Pittosporum tenuifolium, Pseudopanax crassifolium* and *Coriaria arborea*.
D1C	15	SNA C	Loche Linnhe Station	Beech forest dominated by mountain beech (*Nothofagus solandri. cliffortoides*) with occasional mature red beech (*Nothofagus fusca*), located above the highway.

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Identifier	Map Number	SNA Site Name	Property or location Reference	Description/Dominant Indigenous Vegetation
D1D	15	SNA D	Loche Linnhe Station	Grey shrubland and pasture grassland. Species recorded include tree daisys (*Olearia odorata, Olearia fimbriata*), matagouri, *Coprosma propinqua*, briar and *Melicytus alpinus*.
D1E	15	SNA E	Loche Linnhe Station	Beech forest dominated by mountain beech (*Nothofagus solandri. cliffortoides*), with occasional mature red beech (*Nothofagus fusca*).
D4A	15	SNA A Halfway Bay Lake Shore	Lake Wakatipu Station	Red and mountain beech forest in gullies, broadleaf lakeshore forest (including kowhai, broadleaf, occasional southern rata, Olearia species and Coprosma species) and regenerating broadleaf forest, shrubland, bracken fernland, occasional gorse and wild conifers.
D5A	13, 13b	SNA A Sites 1 to 7 Lakeshore Gullies	Cecil Peak Station	Beech forest, shrubland, bracken fernland and pasture grasses.
D6A	12, 13	SNA A McKinlays Creek	Walter Peak Station/Cecil Peak Station	Mountain beech forest with remnant and regenerating shrubland on steep, rocky slopes and exotic grassland that follows along a vehicle track.
D6B	14	SNA B Von – White Burn	Walter Peak Station	A series of extensive ponds and bogs with red tussock merging into dryland hard tussockland.
D7A	12, 14	SNA A Sites 1 to 2 North Von, Lower Wetlands	Mt Nicholas Station/Walter Peak Station	Lacustrine wetland, swamp, marshland and bog.
D7B	12, 14	SNA B North Von, Central Wetlands	Mt Nicholas Station	Palustrine wetlands and sub alpine bogs.
D7C	12	SNA C Sites 1 to 3 North Von, Upper Wetlands	Mt Nicholas Station	Cushion bog, sedgeland, rushland and turf communities containing plants typical of these communities.
D7D	14	SNA D North Von Lower Wetlands	Mt Nicholas Station	A kettle lake, kettle holes and adjacent wetlands and ephemeral wetlands.
E18B	8, 18	SNA B	Watkins Rd, Hawea Flat	Mosaic of short tussock grassland, cushionfields and herbfields.
E18C	8, 18	SNA C	Mt Iron	Kanuka woodland.
E18D	8, 18	SNA D Sites 1 to 2	Mt Iron	Kanuka woodland.
E18G	8	SNA G	Wanaka-Luggate Hwy, Upper Clutha River	Kanuka woodland with some small areas of short tussock grassland dominated by introduced grasses.
E18H	8, 18	SNA H	Mt Iron	Kanuka woodland.
E19A	8	SNA A	Glenfoyle Station	Kanuka woodland.

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Identifier	Map Number	SNA Site Name	Property or location Reference	Description/Dominant Indigenous Vegetation
E19B	8, 11	SNA B	Glenfoyle Station	Kanuka woodland, dominated by kanuka but also including a more diverse plant assemblage in the gully bottoms including matagouri, *Coprosma propinqua* and tree daisys (Olearia sp.).
E19C	8, 11	SNA C	Glenfoyle Station	Kanuka woodland.
E30A	8, 11, 11a	SNA A Dead Horse Creek	Lake McKay Station	Kanuka woodland dominated by kanuka, but also includes shrubland species such as matagouri, native broom, *Coprosma propinqua* and mature stands of *Olearia lineata*.
E30B	8, 11	SNA B Sites 1 to 4 Tin Hut Creek	Lake McKay Station	Kanuka woodland dominated by kanuka but also includes other shrubland species such as matagouri, native broom, and *Coprosma propinqua*.
E30C	11	SNA C Alice Burn Tributary	Lake McKay Station	Grey shrubland, which includes significant populations of *Olearia lineata*.
E30D	8, 11, 18a	SNA D Luggate Creek	Lake McKay Station	Kanuka woodland dominated by kanuka but also includes other shrubland species such as matagouri, native broom, and *Coprosma propinqua*.
E30E	8, 11	SNA E Sites 1 to 2 Lake McKay	Lake McKay Station	Kanuka woodland dominated by kanuka but also includes other shrubland species such as matagouri, native broom, and *Coprosma propinqua*.
E30F	8, 11	SNA F Alice Burn	Lake McKay Station	Kanuka woodland dominated by kanuka but also includes other shrubland species such as matagouri, native broom, and *Coprosma propinqua*.
E35A	8, 11	Sites 1 to 11 Sheepskin Creek	Luggate-Cromwell Road, Upper Clutha.	Diverse kanuka, and mixed kanuka/mingimingi–matagouri, scrub/shrubland communities in mid to lower reaches of the Sheepskin Creek catchment with intervening areas of pasture.
E37A	8, 11	SNA A	Kane Road – Hawea Back Road, Hawea Flat	Grey shrubland on rocky outcrop, including *Coprosma intertexta, Coprosma propinqua, Coprosma tayloriae, Coprosma rigida, Coprosma crassifolius, Carmichaelia petriei, Melicytus alpinus, Discaria toumatou, Pteridium esculentum, Muehlenbeckia complexa* and *Cordyline australis*.
E38A	8, 18a	SNA A Sites 1 to 5	Stevensons Road, Clutha River	Cushion fields (including *Pimelea sericeovillosa subsp. pulvinaris*) and kanuka stands.
E39A	8, 18, 24b	SNA A	Dublin Bay Road, Albert Town, Wanaka.	Short tussock grassland and cushion field.
E44A	8	SNA A Sites 1 to 2	Te Awa Road Hawea River	Hard tussock grassland with shrubland species, including kanuka, *Ozothamnus leptophyllus* and matagouri.
E45A	8	SNA A Sites 1 to 2	Te Awa Road Hawea River	Kanuka stands with other native species interspersed including *Coprosma propinqua, Ozothamnus leptophyllus*, matagouri and stands of bracken fern.

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Identifier	Map Number	SNA Site Name	Property or location Reference	Description/Dominant Indigenous Vegetation
F2A	10	SNA A	Branch Creek, Cardrona Valley	Shrubland including *Dracophyllum longifolium, Dracophyllum uniflorum, Olearia avicennifolia, Olearia arborscens, Olearia nummularifolia, Olearia odorata,* and *Coprosma propinqua,* with a small pocket of silver beech forest.
F2B	10	SNA B Sites 1 to 3	Branch Creek, Cardrona Valley	Shrubland consisting of matagouri, *Olearia odorata, Olearia bullata, Aristotelia fruiticosa, Coprosma propinqua, Coprosma tayloriae, Carmichaelia petriei*, sweet briar, elderberry, *Melicytus alpinus, Rubus schmidelioides* and *Meuhlenbeckia australis*.
F2C	10	SNA C Sites 1 to 2	Branch Creek, Cardrona Valley	Shrubland consisting of matagouri, *Olearia odorata, Olearia bullata, Aristotelia fruiticosa, Coprosma propinqua, Carmichaelia petriei,* sweet briar, elderberry, *Melicytus alpinus, Rubus schmidelioides* and *Meuhlenbeckia australis.*
F2D	10	SNA D	Branch Creek, Cardrona Valley	Shrubland consisting of matagouri, *Olearia odorata, Olearia bullata, Aristotelia fruiticosa, Coprosma propinqua, Coprosma tayloriae, Carmichaelia petriei,* sweet briar, elderberry, *Melicytus alpinus, Rubus schmidelioides* and *Meuhlenbeckia australis*.
F21A	10	SNA A	Hillend Station, Wanaka	Coprosma-matagouri-Olearia shrubland with some elder and briar and a small pocket of silver beech forest.
F21B	10	SNA B Sites 1 ~~to~~ and 3	Hillend Station, Wanaka	Shrubland including matagouri, *Coprosma propinqua*, kanuka – manuka, *Olearia odorata*, briar and elder.
~~F21C~~	~~10~~	~~SNA C Sites 1 to 2~~	~~Hillend Station, Wanaka~~	~~Beech forest fragments with extensive areas of regenerating shrubland.~~
F22A	10	SNA A Sites 1 to 2 Back Creek	Back Creek, Cardrona Valley.	Grey shrubland dominated by *Olearia odorata*, *Coprosma propinqua* and matagouri.
F26A	10	SNA A	Avalon Station, Cardrona Valley	Grey shrubland including *Coprosma propinqua*, matagouri, *Olearia odorata* and briar.
F26B	10	SNA B	Avalon Station, Cardrona Valley	Grey shrubland including Olearia spp., *Coprosma propinqua*, matagouri and *Corokia cotoneaster*.
F26C	10	SNA C Sites 1 to 3	Avalon Station, Cardrona Valley	Grey shrubland including *Olearia lineata*, *Coprosma propinqua*, matagouri, *Hebe salicifolia* and *Carmichaelia kirkii*.
F31A	13, 15a	SNA A Kawarau Faces	Waitiri Station, Kawarau Gorge.	Shrubland heavily dominated by matagouri and sweet briar but also includes *Coprosma propinqua* and to a lesser degree *Olearia odorata*.
F32A	13, 30	SNA A Sites 1 to 3 Owen Creek	Remarkables Range.	Grey shrubland dominated by Olearia species, *Coprosma propinqua*, *Discaria toumatou, Carmichaelia petriei, Melicytus alpinus, Rubus schmidelioides* and Meuhlenbeckia species.

Comment [CB34]: Submitter 383. Area reduced.

Comment [CB35]: Submitter 383. Site 2 removed. Sites 1 and 3 reduced.

Comment [CB36]: Submitter. 383. Sites 1 and 2 removed.

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Identifier	Map Number	SNA Site Name	Property or location Reference	Description/Dominant Indigenous Vegetation
F32B	13, 30	SNA B Rastus Burn	Remarkables Range.	Grey shrubland dominated by Olearia species, *Coprosma propinqua, Discaria toumatou, Carmichaelia petriei, Melicytus alpinus, Rubus schmidelioides*, and Meuhlenbeckia species.
F40A	13, 15a	SNA A	Gibbston Valley	Grey shrubland largely dominated by matagouri and *Coprosma propinqua*, but also includes populations of Olearia spp. and *Muehlenbeckia complexa*.
F40B	13, 15a	SNA B	Gibbston Valley	Grey shrubland including *Olearia odorata, Olearia lineata, Discaria toumatou, Coprosma propinqua, Melicytus alpinus, Muehlenbeckia complexa, Rubus schmidelioides, Carmichaelia petriei, Clematis quadribracteolata* and *Hebe salicifolia.*
F40C	13, 15a	SNA C	Gibbston Valley	Grey shrubland.
F40D	13, 15a	SNA D	Gibbston Valley	Grey shrubland dominated by matagouri and kowhai, but also includes *Coprosma propinqua, Melycitus alpinus, Coprosma crassifolia* and *Muehlenbeckia complexa*.
G28A	10, 26	SNA A Site 6	Coronet Peak (Bush Creek)	*Olearia odorata*–matagouri shrubland.
G28A	10, 26	SNA A Site 7	Coronet Peak (Bush Creek)	Mountain beech forest.
G33A	10	SNA A	Ben Lomond Station, Upper Shotover River	Mixed mingimingi–matagouri–Olearia spp. shrubland.
G33B	10	SNA B	Ben Lomond Station, Upper Shotover River	Mixed mingimingi–matagouri–Olearia spp. shrubland.
G33C	9	SNA C	Ben Lomond Station, Upper Shotover River	Extensive manuka scrub & shrubland community and mountain beech forest.
G34A	7	SNA A	Alpha Burn Station, West Wanaka	Kanuka, mingimingi-matagouri-kohuhu-broadleaf-manuka/bracken shrubland.
G34B	7	SNA B	Alpha Burn Station, West Wanaka	Kohuhu-broadleaf shrubland merging with mingimingi-matagouri/bracken shrubland.
G34C	7	SNA C	Alpha Burn Station, West Wanaka	Mixed broadleaf–kohuhu–mingimingi–matagouri–bracken shrubland.
G34D	7	SNA D	Alpha Burn Station, West Wanaka	Mixed beech forest, manuka forest, montane shrubland.

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Identifier	Map Number	SNA Site Name	Property or location Reference	Description/Dominant Indigenous Vegetation
2A	5	Hunter River Delta	G38 270 557	WERI: A braided river used for fishing and recreational boating activities. An important site for bird breeding.
16A	10	Caspar Flat Bush	E40 669 936	SSWI: An area with mountain beech. Bird species present include yellow breasted tit, rifleman, grey warbler and silvereye. Reasonable canopy but low plant diversity (natural for environment).
17A	10	Left Branch bush	E40 665 925	SSWI: An area of mountain beech, mountain toatoa, small leaf *Coprosmas* and ferns. A very steep south facing habitat. Reasonable canopy but very little plant diversity (natural for environment). Bird species include yellow breasted tit, rifleman, silvereye and grey warbler. Some large slips.
18A	10	Butchers Gully Bush	E40 665 906	SSWI: An area with mountain beech and mountain toatoa. Bird species include grey warbler, rifleman and yellow breasted tit. A steep south facing habitat. Reasonable canopy but little plant diversity. Some slipping.
35A	9, 10	Mount Aurum Remnants	S123 520 930	SSWI: An area with mountain beech, situated in gullies and on southern faces. Reasonable canopy, but low plant diversity. Yellow breasted tit, rifleman and grey warbler present.
38A	12	Moke Lake	S132 470 738	WERI, SSWI: A steep montane lake surrounded by tussock farmland. Brown trout fishery.
40A	12	Lake Isobel	S132 406 807	WERI: A lake with restiad bog and tussock land (*Chionochloa* species).
41A	12	Lake Kirkpatrick	S132 477 704	WERI, SSWI: A sub-alpine lake with *Carex* bog and surrounded by tussock farmland. Common native water-fowl present. More important as trout fishery.
42A	12, 38	Few Creek Bush (includes 127)	S132 440 675	SSWI: A moderate sized plain beech forest (red beech, mountain beech) with common forest birds, including brown creeper, fantail, bellbird, rifleman, grey warbler and yellow breasted tit.
43A	12, 38	Twelve Mile Bush	S132 420 655	SSWI: Reasonable sized bush with more diversity than usual, with red beech, mountain beech, broadleaf shrubbery, bracken and tussock surrounds. Good range of common forest birds, including brown creeper, fantail, bellbird, rifleman, grey warbler and yellow breasted tit. Very good lakeshore diversity.
57A	31	Lake Johnson	F41 735 695	WERI, SSWI: An eutrophied lowland lake, rush and sedge swamp (*Carex* species - Cyperaceae).
69A	13	Shadow Basin Tarn	F41 798 639	Montane lake and montane flush surrounded by steep slopes of snow tussock, cushion vegetation and herb fields.
71A	13	Lake Alta (adjoins 70)	F41 801 632	WERI: A montane lake surrounded by steep snow tussock slopes with extensive cushion vegetation and herb fields.

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Identifier	Map Number	SNA Site Name	Property or location Reference	Description/Dominant Indigenous Vegetation
72A	13	Upper Wye Lakes	F41 812 612	WERI: Four montane lakes surrounded by scree and snow tussock. Cushion vegetation and herb fields.
91A	5	Dingle Lagoon	G39 220 347	WERI SSWI: A lagoon with a sloping edge with good plant communities and populations of paradise shelduck, mallard, grey duck and Canada geese.
114A	6, 9	Mt Earnslaw Forest and Bush Remnants	E40	SSWI: A healthy area of bush with red beech, totara, mountain beech, *Grisilinea,* fuchsia, wineberry, *Coprosma* sp., hard fern. Good numbers of bush birds present, including yellow breasted tit, rifleman, bellbird, grey warbler and silvereye.
126A	32	Gorge Road Wetland	S132 555 720	Significant site of insects and plants *(Carox socta).*

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33.9 Threatened Environment Classification Maps

Threatened Environment Classification maps (as defined by Land Environments of New Zealand Level IV), identifying the acutely and chronically threatened environments with less than 20% indigenous cover remaining.

Note: The Council's webmap illustrates this information at a greater scale.

Figure A1

Threatened Environment Classification

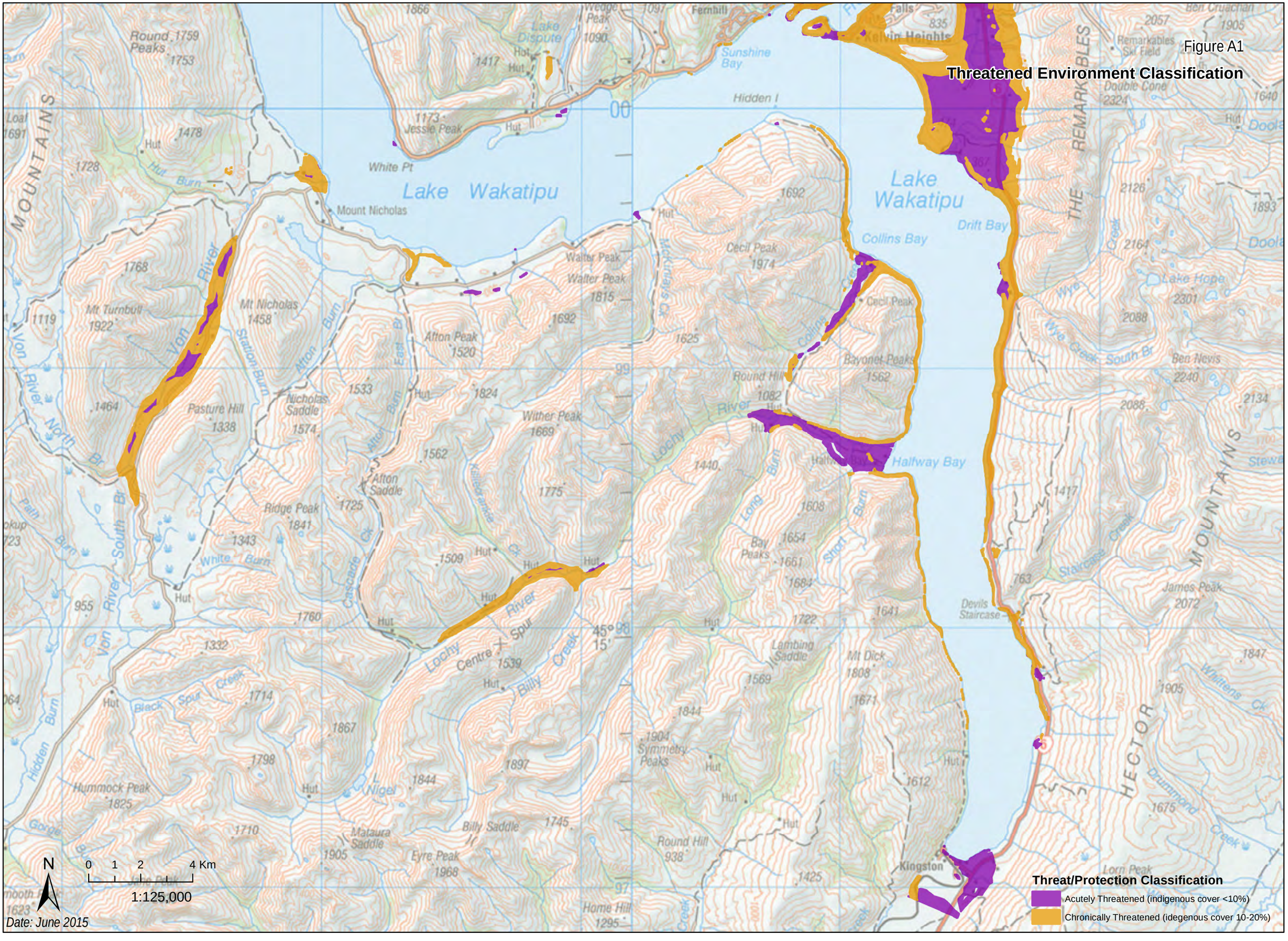


Figure B1

Threatened Environment Classification

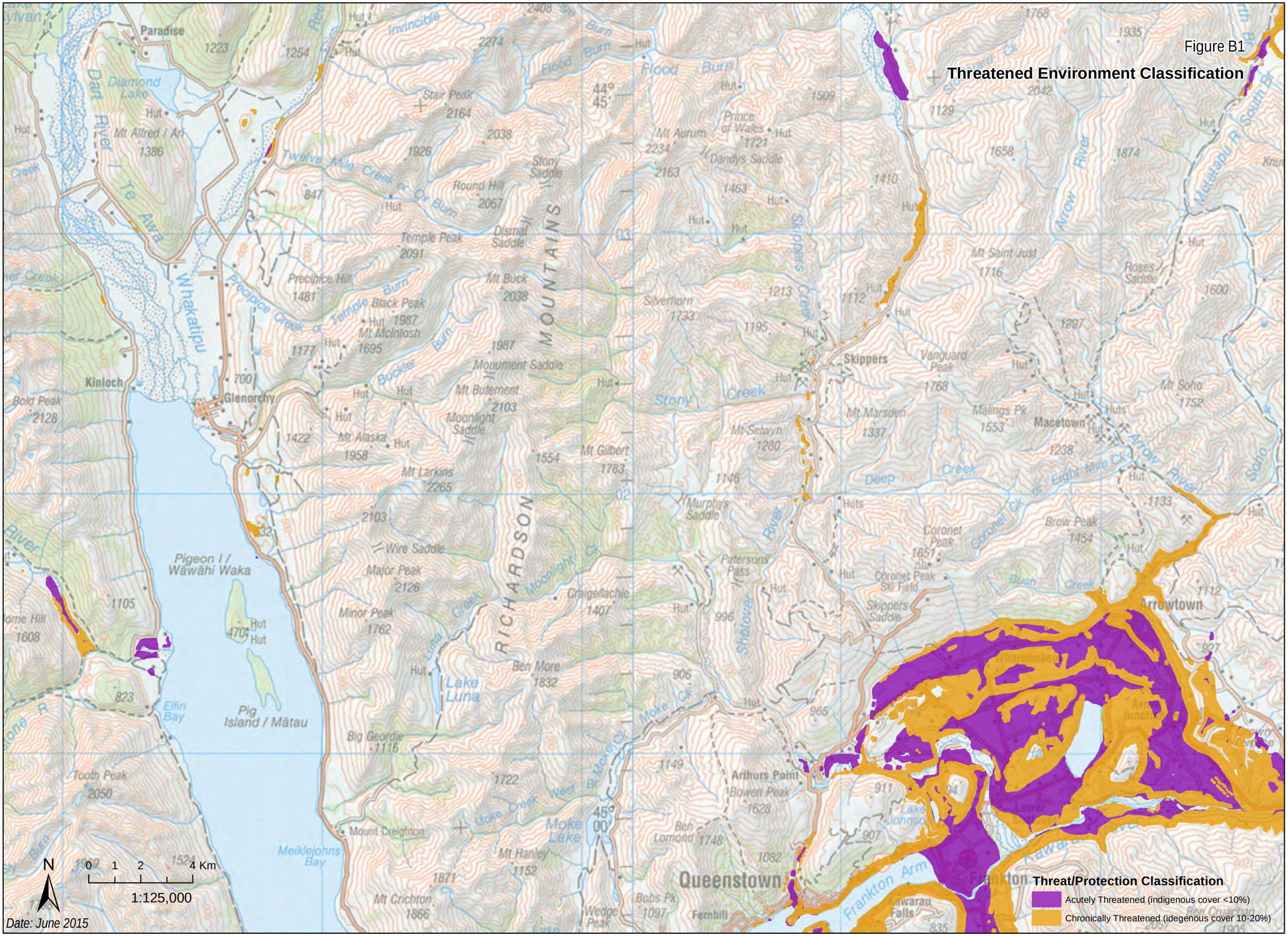


Figure B2

Threatened Environment Classification

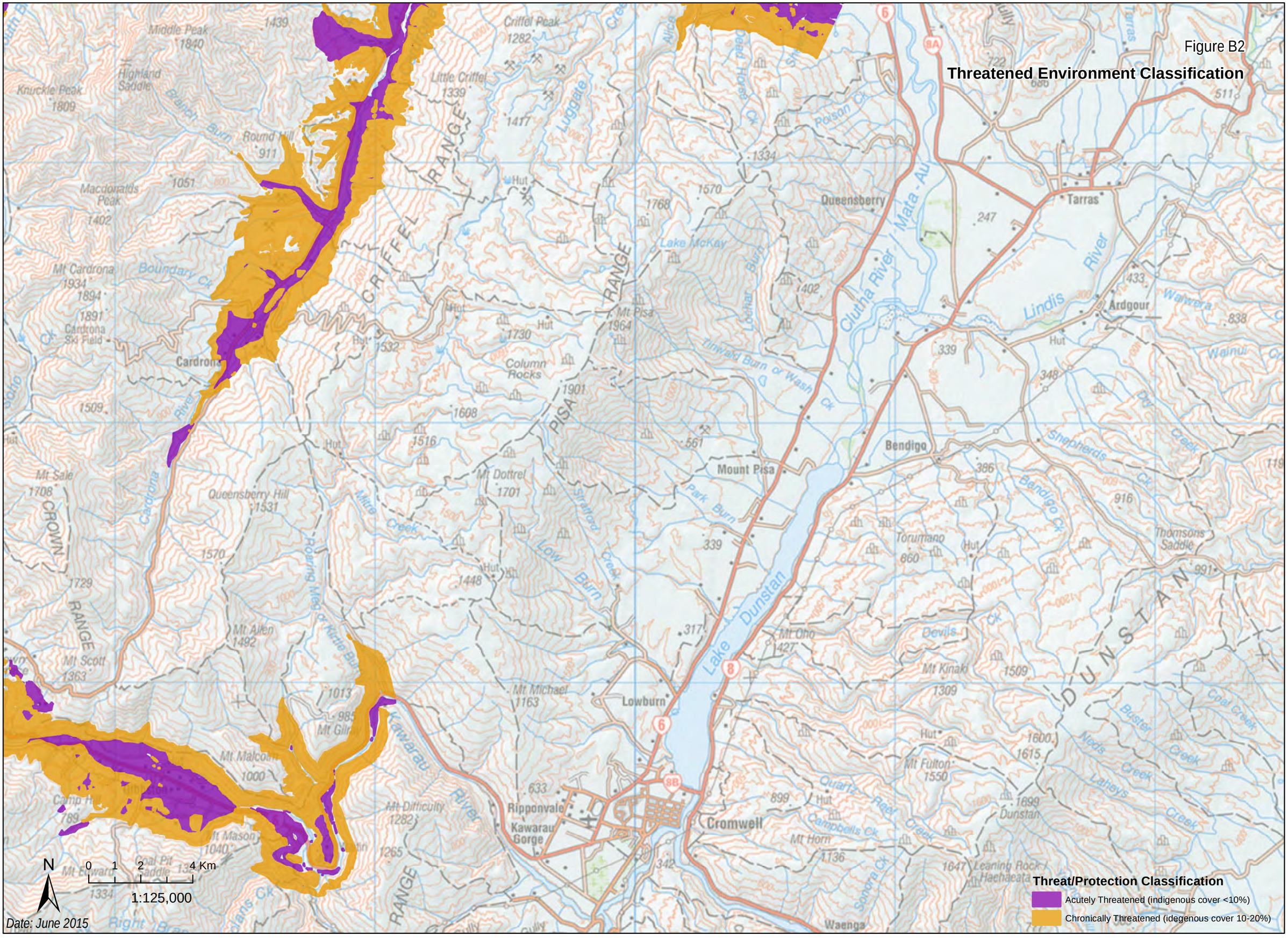


Figure C1

Threatened Environment Classification

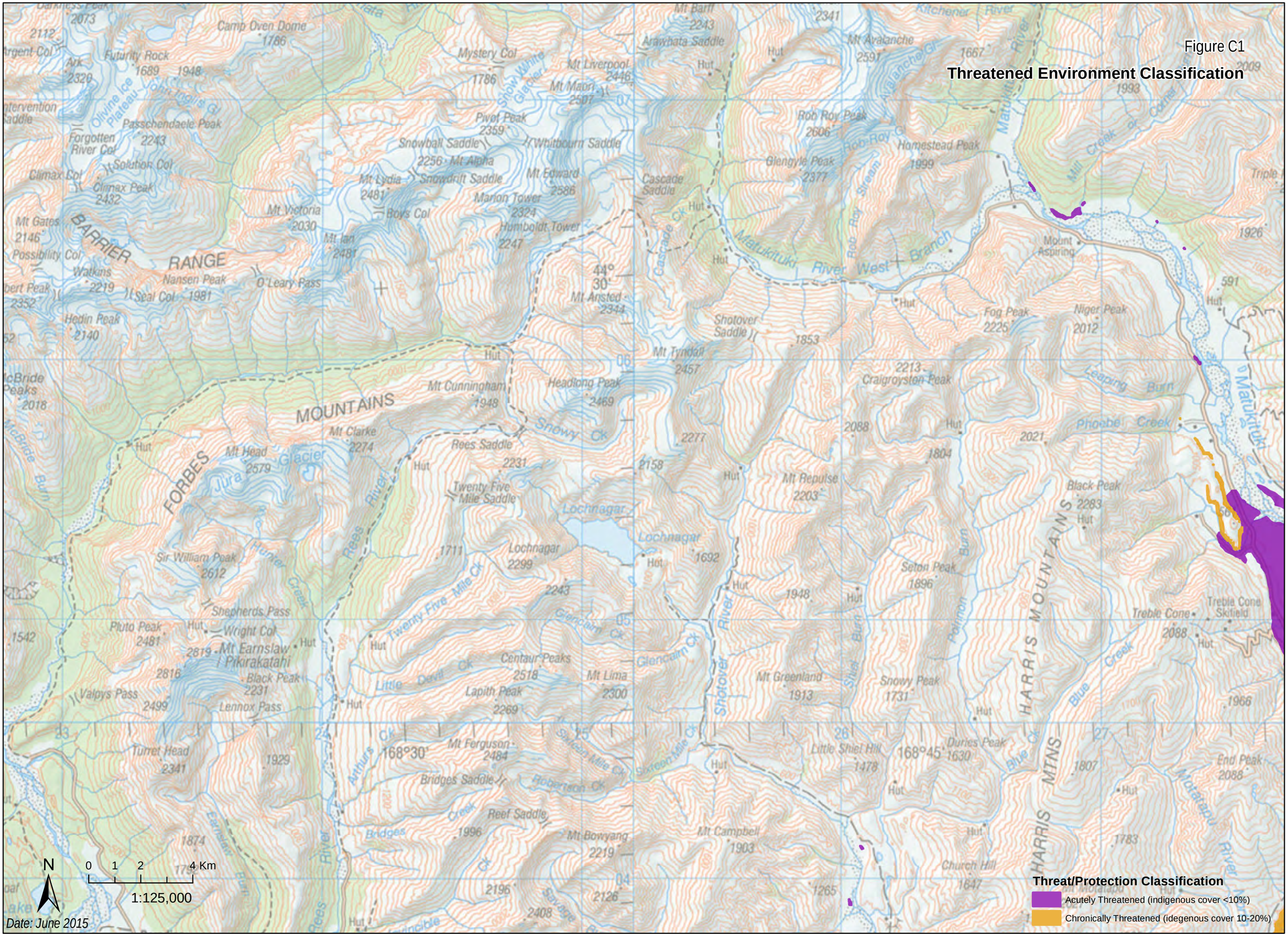


Figure C2

Threatened Environment Classification

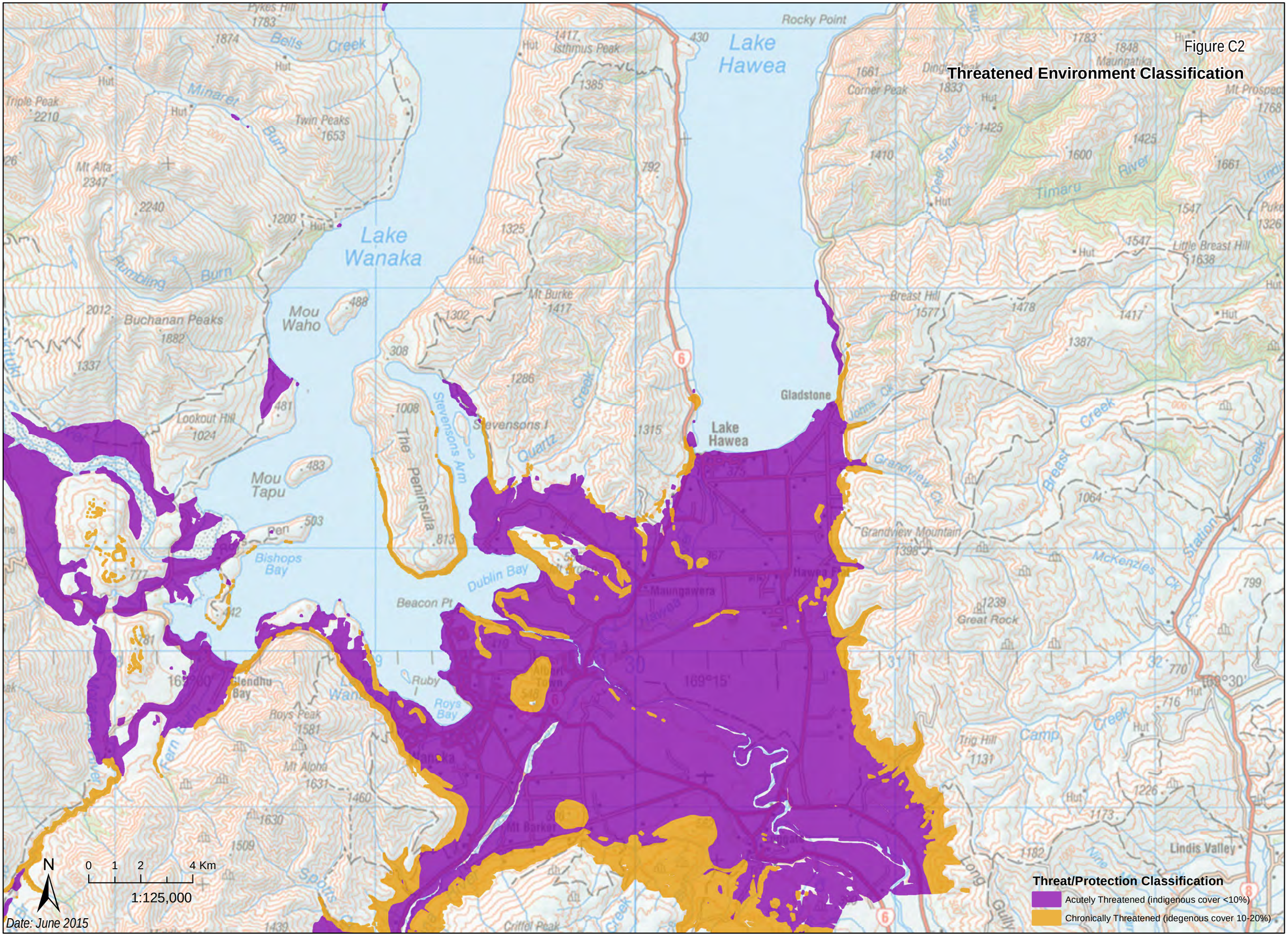
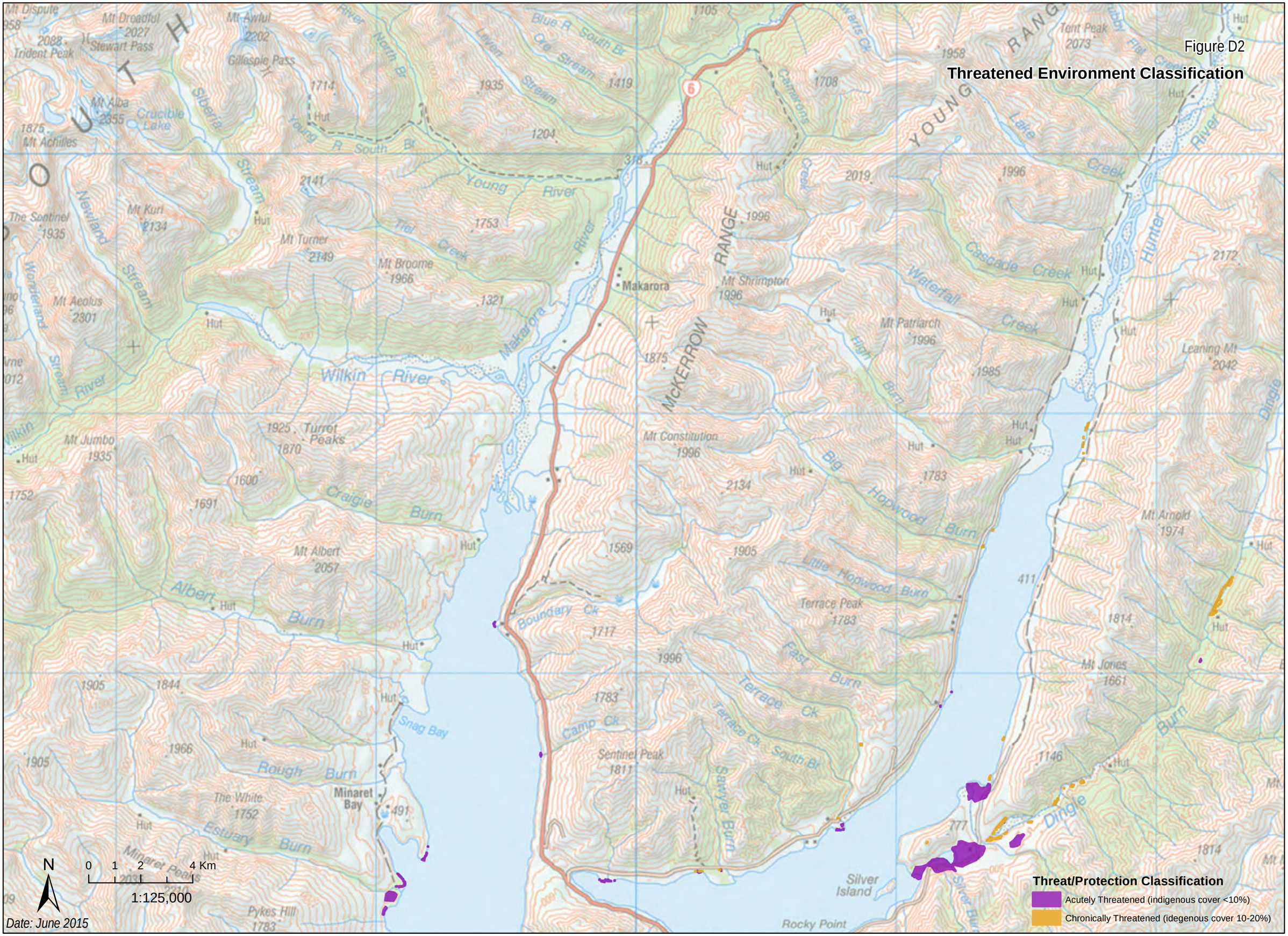


Figure D2

Threatened Environment Classification



33.10 Framework for the use of biodiversity offsets

The following sets out a framework for the use of biodiversity offsets. It should be read in conjunction with the NZ Government *Guidance on Good Practice Biodiversity Offsetting in New Zealand.* August 2014 ~~(or any successor Central Government guidance and standards)~~:

1. Restoration, enhancement and protection actions will only be considered a biodiversity offset where they are used to offset the anticipated residual effects of activities after appropriate avoidance, minimisation, remediation and mitigation actions have occurred as per ~~new policy XX~~ Policy 33.2.8, i.e. not in situations where they are used to mitigate the adverse effects of activities.

2. A proposed biodiversity offset should contain an explicit loss and gain calculation and should demonstrate the manner in which no net loss or preferably a net gain in biodiversity can be achieved on the ground.

3. A biodiversity offset should recognise the limits to offsets due to irreplaceable and vulnerable biodiversity and its design and implementation should include provisions for addressing sources of uncertainty and risk of failure the delivery of no net loss.

4. Restoration, enhancement and protection actions undertaken as a biodiversity offset are demonstrably additional to what otherwise would occur, including that they are additional to any remediation or mitigation undertaken in relation to the adverse effects of the activity.

5. Offset actions should be undertaken close to the location of development, where this will result in the best ecological outcome.

6. The values to be lost through the activity to which the offset applies are counterbalanced by the proposed offsetting activity which is at least commensurate with the adverse effects on indigenous biodiversity, so that the overall result is no net loss, and preferably a net gain in ecological values.

7. The offset is applied so that the ecological values being achieved through the offset are the same or similar to those being lost.

8. As far as practicable, the positive ecological outcomes of the offset last at least as long as the impact of the activity, and preferably in perpetuity. Adaptive management responses should be incorporated into the design of the offset, as required to ensure that the positive ecological outcomes are maintained over time.

9. The biodiversity offset should be designed and implemented in a landscape context – i.e. with an understanding of both the donor and recipient sites role, or potential role in the ecological context of the area.

10. The ~~consent~~ development application identifies the intention to utilise an offset, and includes a biodiversity offset management plan that:

    i. sets out baseline information on indigenous biodiversity that is potentially impacted by the proposal at both the donor and recipient sites.

    ii. demonstrates how the requirements set out in this appendix will be addressed.

    iii. identifies the monitoring approach that will be used to demonstrate how the matters set out in this appendix have been addressed, over an appropriate timeframe.

Comment [CB37]: Submitter 373. Author note. I have used strike through to indicate the parts of the schedule drafted by DOC that I do not support.

Comment [CB38]: Any changes to a document incorporated by reference need to go through a plan change or variation and this phrase is not supported.

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(While this appendix sets out a framework for the use of biodiversity offsets in the Queenstown Lakes District Council District Plan, many of the concepts are also applicable to other forms of effects management where an overall outcome of no net loss and preferably a net gain in biodiversity values are not intended, but restoration and protection actions will be undertaken).

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RECOMMENDED CHANGES TO DEFINITIONS CHAPTER 2

Indigenous Vegetation	Means vegetation that occurs naturally in New Zealand, or arrived in New Zealand without human assistance, includes both vascular and non-vascular plants.

Comment [CB39]: Submitter 706

Clearance Of Vegetation **(Includes Indigenous Vegetation)**	Means the removal, trimming, felling, or modification of any vegetation and includes cutting, crushing, cultivation, soil disturbance including direct drilling, spraying with herbicide or burning. Clearance of vegetation includes, the deliberate application of water where it would change the ecological conditions such that the resident indigenous plant(s) are killed by competitive exclusion. Includes dryland cushion field species.

Comment [CB40]: Submitter 706

Comment [CB41]: Submitter 373.

Biodiversity Offsets	Means measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate avoidance, minimisation, remediation and mitigation measures have been taken. The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground.

No net loss	Means no overall reduction in biodiversity as measured by the type, amount and condition.

Environmental Compensation	Means actions offered as a means to address residual adverse effects to the environment arising from project development that are not intended to result in no net loss or a net gain of biodiversity on the ground, includes residual adverse effects to other components of the environment including landscape, the habitat of trout and salmon, open space, recreational and heritage values.

APPENDIX 2

SECTION 32AA EVALUATION

Appendix 2
Section 32AA Assessment

Note:

The relevant provisions from the Revised Chapter are set out below, showing:

1) Red underlined text for additions and ~~red strike through~~ text for deletions, Appendix 1 to Craig Barr's Right of Reply, dated 3 June 2016.

2) Purple underlined text for additions and ~~purple strike through~~ text for deletions, Working Draft in response to the Panel's Fourth Procedural Minute, dated 13 April 2016.

3) Black underlined text for additions and ~~black strike through~~ text for deletions, Appendix 1 to Craig Barr's s42A report, dated 7 April 2016.

Recommended Amendments to include biodiversity offsetting through changes to Policy 33.2.1.8, new Schedule 33.10 and new definitions of biodiversity offsetting, no net loss and environmental compensation.

New policy 33.2.1.8

33.2.1.8 ~~Where the adverse effects of an activity on indigenous biodiversity~~ values ~~cannot be avoided, remedied or mitigated, consideration will be given to whether there has been any compensation or biodiversity offset proposed and the extent to which any offset will result in~~ no net loss and ~~preferably, a net indigenous biodiversity gain.~~

Manage the effects of activities on indigenous biodiversity by:

a) avoiding as far as practicable and, where total avoidance is not practicable, minimising adverse effects

b) requiring remediation where adverse effects cannot be avoided

c) requiring mitigation where adverse effects on the areas identified above cannot be avoided or remediated

d) requiring any residual adverse effects on significant indigenous vegetation or indigenous fauna to be offset through protection, restoration and enhancement actions that achieve no net loss and preferably a net gain in indigenous biodiversity values having particular regard to;

i. limits to biodiversity offsetting due the affected biodiversity being irreplaceable or vulnerable;
ii. the ability of a proposed offset to demonstrate it can achieve no net loss or preferably a net gain;

iii. Schedule 33.10 on Biodiversity Offsets

e) enabling any residual adverse effects on other indigenous vegetation or indigenous fauna to be offset through protection, restoration and enhancement actions that achieve no net loss and preferably a net gain in indigenous biodiversity values having particular regard to;

i. the ability of a proposed offset to demonstrate it can achieve no net loss or preferably a net gain;

ii. Schedule 33.10 on Biodiversity Offsets

New Definitions

Biodiversity Offsets	Means measurable conservation outcomes resulting from actions designed to compensate for significant residual adverse biodiversity impacts arising from project development after appropriate avoidance, minimisation, remediation and mitigation measures have been taken. The goal of biodiversity offsets is to achieve no net loss and preferably a net gain of biodiversity on the ground.

No net loss	Means no overall reduction in biodiversity as measured by the type, amount and condition.

Environmental Compensation	Means actions offered as a means to address residual adverse effects to the environment arising from project development that are not intended to result in no net loss or a net gain of biodiversity on the ground, includes residual adverse effects to other components of the environment including landscape, the habitat of trout and salmon, open space, recreational and heritage values.

New Schedule 33.10

Framework for the use of biodiversity offsets

The following sets out a framework for the use of biodiversity offsets. It should be read in conjunction with the NZ Government *Guidance on Good Practice Biodiversity Offsetting in New Zealand.* August 2014 ~~(or any successor Central Government guidance and standards)~~:

1. Restoration, enhancement and protection actions will only be considered a biodiversity offset where they are used to offset the anticipated residual effects of activities after appropriate avoidance, minimisation, remediation and mitigation actions have occurred as per ~~new policy XX~~ Policy 33.2.8, i.e. not in situations where they are used to mitigate the adverse effects of activities.

2. A proposed biodiversity offset should contain an explicit loss and gain calculation and should demonstrate the manner in which no net loss or preferably a net gain in biodiversity can be achieved on the ground.

3. A biodiversity offset should recognise the limits to offsets due to irreplaceable and vulnerable biodiversity and its design and implementation should include provisions for addressing sources of uncertainty and risk of failure the delivery of no net loss.

4. Restoration, enhancement and protection actions undertaken as a biodiversity offset are demonstrably additional to what otherwise would occur, including that they are additional to any remediation or mitigation undertaken in relation to the adverse effects of the activity.

5. Offset actions should be undertaken close to the location of development, where this will result in the best ecological outcome.

6. The values to be lost through the activity to which the offset applies are counterbalanced by the proposed offsetting activity which is at least commensurate with the adverse effects on indigenous biodiversity, so that the overall result is no net loss, and preferably a net gain in ecological values.

7. The offset is applied so that the ecological values being achieved through the offset are the same or similar to those being lost.

8. As far as practicable, the positive ecological outcomes of the offset last at least as long as the impact of the activity, and preferably in perpetuity. Adaptive management responses should be incorporated into the design of the offset, as required to ensure that the positive ecological outcomes are maintained over time.

9. The biodiversity offset should be designed and implemented in a landscape context – i.e. with an understanding of both the donor and recipient sites role, or potential role in the ecological context of the area.

10. The ~~consent~~ development application identifies the intention to utilise an offset, and includes a biodiversity offset management plan that:

    i. sets out baseline information on indigenous biodiversity that is potentially impacted by the proposal at both the donor and recipient sites.

    ii. demonstrates how the requirements set out in this appendix will be addressed.

    iii. identifies the monitoring approach that will be used to demonstrate how the matters set out in this appendix have been addressed, over an appropriate timeframe.

(While this appendix sets out a framework for the use of biodiversity offsets in the Queenstown Lakes District Council District Plan, many of the concepts are also applicable to other forms of effects management where an overall outcome of no net loss and preferably a net gain in biodiversity values are not intended, but restoration and protection actions will be undertaken).

Costs	Benefits	Effectiveness & Efficiency
• None identified. • The recommended revised policy does not compel a proponent to undertake biodiversity offsetting, nor does the phrasing in the policy compel them to achieve a 'net gain' in biodiversity values. The policy specifies that the goal biodiversity offsetting is 'no net loss' and a 'net gain' is preferable.	• The adoption of Policy 33.2.1.8 as requested by DOC and the supporting definitions and schedule provide detailed, clear and best practice guidance on biodiversity offsetting. • I refer to and accept the evidence or Dr Barea and Mr Deavoll for DOC with respect to the technical merits of the policy and supporting definitions and schedule. This evidence is available on the Council's website referenced 'SO373' http://www.qldc.govt.nz/planning/district-plan/proposed-district-plan/proposed-district-plan-hearings/rural/pre-lodged-and-pre-tabled-evidence/ • The small wording change to the policy I have recommended, advised by the Council's ecologist Mr Davis, is not consequential and broadens the ambit of the policy. • The adoption of the policy of 'environmental compensation' is also helpful to provide a distinction	• The changes are effective because they provide a best practice method for providing a planning framework to utilise biodiversity offsetting.

	between 'biodiversity offsetting'. This component is available to be used against a broader range of resources including landscape and recreational resources.	

Recommended new policy 33.2.1.11
Encourage opportunities through development to protect and enhance high quality indigenous vegetation and the rehabilitation of degraded indigenous vegetation communities.

Costs	**Benefits**	**Effectiveness & Efficiency**
• No costs identified. The policy does not facilitate degradation of indigenous biodiversity values in favour of advancing development. Nor would it compel those undertaking development to protect and enhance indigenous vegetation.	• This change provides the opportunity for development to protect, maintain and enhance indigenous biodiversity.	• The new policy will provide better linkages with the assessment matters 21.7.3.3 Rural Zone) and 23.7.6 (Gibbston Character Zone) that consider any positive effects through development.

Recommended changes to Policy 33.2.2.3
~~Recognise that t~~ The majority of Significant Natural Areas are located within land used for farming activity or recreational areas and provide for small scale, low impact indigenous vegetation removal, stock grazing, the construction of fences and small scale farm tracks, and the maintenance of existing fences and tracks.

Costs	**Benefits**	**Effectiveness & Efficiency**
• None identified.	• This change will broaden the ambit of the policy and recognise that recreational areas within SNAs could help the appreciation of these areas on the basis the values of them are not degraded by the recreational activity.	• This change is effective because it provides a more direct connection and implementation with rule 33.4.3 that permits clearance in the following circumstances: *Indigenous vegetation clearance for the construction of walkways or trails up to 1.5 metres in width provided that it does not involve the clearance of any threatened plants listed in section 33.7 or any tree greater than a height of 4*

		metres.

Recommended new rule 33.3.4.4 exempting the requirement for a resource consent in certain circumstances
Indigenous vegetation clearance within the Ski Area Sub Zones on land administered under the Conservation Act 1987 is exempt from the rules in Tables 1 to 4 where the relevant approval has been obtained from the Department of Conservation, providing that: (a) The indigenous vegetation clearance does not exceed the approval by the Department of Conservation; (b) Prior to the clearance of indigenous vegetation, persons shall provide to the Council the relevant application and the approval from the Department of Conservation; and, (c) The Council is satisfied that the application information submitted to the Department of Conservation adequately identifies the indigenous vegetation to be cleared and the effects of the clearance.

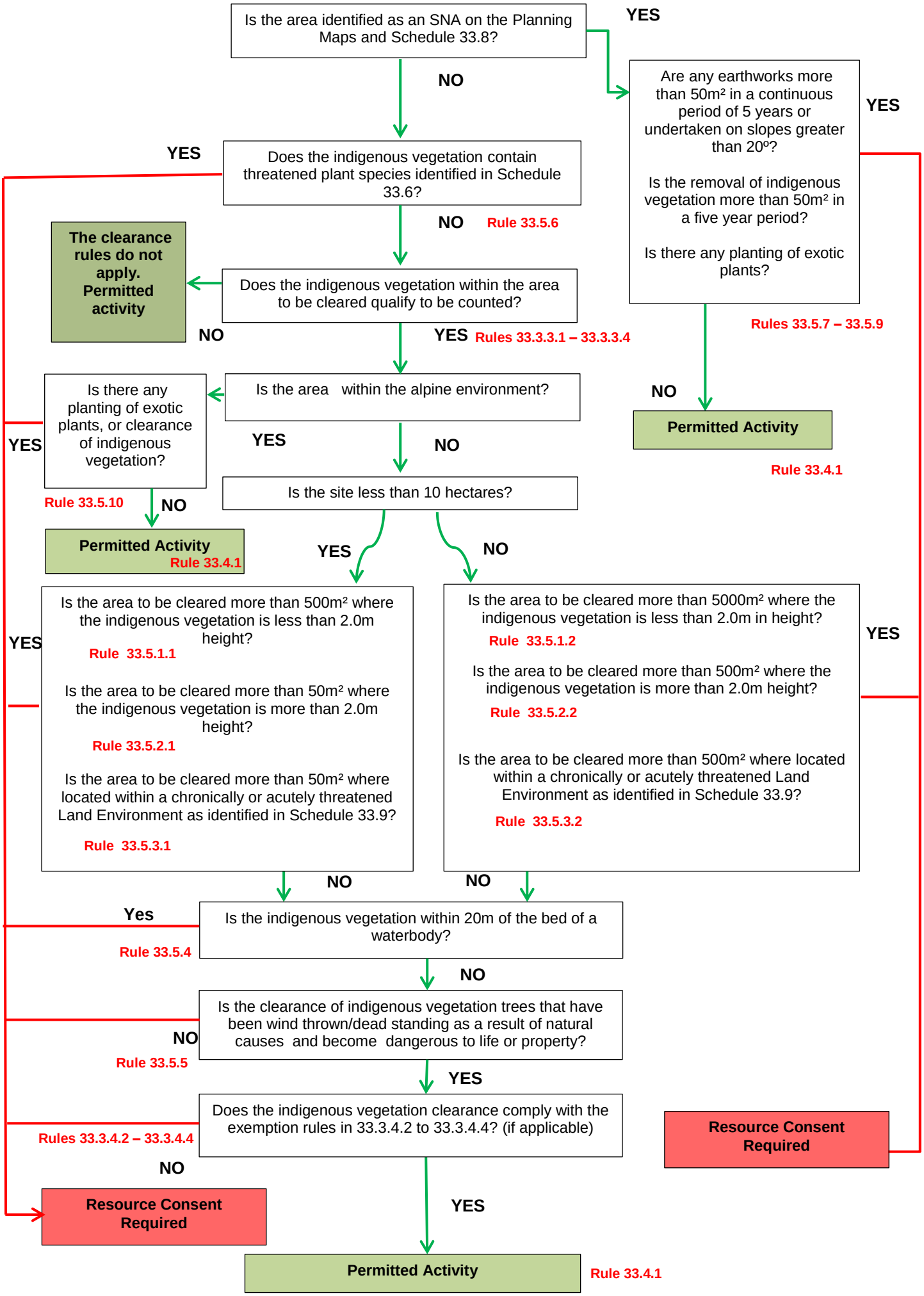
Costs	**Benefits**	**Effectiveness & Efficiency**
• Small administrative costs to the proponent and the Council associated with satisfying limbs (b) and (c) however this will not require an assessment or an expert review.	• This change will remove the double up associated with persons requiring approval from DoC for land administered under the Conservation Act 1987.	• This change is efficient because it removes the duplication of processes.

Recommended modifications to rules in Table 1 to Table 4 and consequential modifications to implementation methods 33.3.3
Refer to the recommended revised chapter in **Appendix 1**.

Costs	**Benefits**	**Effectiveness & Efficiency**
• None identified. The changes are not substantive and do not result in a more lenient or onerous permitted clearance of indigenous vegetation.	• The changes will make it easier to interpret the rules.	• This change is efficient and effective in that it further improves certainty and confidence in administration of the rules.

APPENDIX 3

Flow Diagram of the Chapter 33 Rules



Clearance of indigenous vegetation flow diagram. Council Reply 3 June 2016

APPENDIX 4

Examples of Resource Consents for 'Whole of Farm Operations'

Ecological Memorandum

Title: Branch Creek Station Vegetation Clearing Consent Application – Ecological Update

Consent Application Number: RM090530

Date: 30 August 2009

1.0 Introduction

The following ecological memo has been prepared to update the ecological report submitted with the Branch Creek Station vegetation clearing consent application. The update is based on the review of threatened flora and fauna databases and review of threatened Land Environment New Zealand (LENZ) units. The update also considers the Ministry for the Environment (MfE) national priority statements for the protection of threatened native biodiversity on private land (published in 2007) and the ecological impact based on an ecological impact matrix attached to this memo.

2.0 Land Environments New Zealand and Threatened Flora and Fauna

2.1 Land Environments New Zealand

A description of LENZ and its application to New Zealand's biodiversity needs is attached to this memo. Table 1 below shows the LENZ units within the clearance blocks. Two of the LENZ units within the clearing areas contain indigenous vegetation that is less than 20% of the original cover. These are discussed below.

2.1.1 LENZ Unit 4.1d

Indigenous vegetation representative of LENZ unit N4.1d is kanuka, matagouri, small leaved coprosmas and olearias, *Carmichaelia* spp. and kowhai. The vegetation within LENZ unit 4.1d has had a long history of disturbance and is now dominated by short tussock grassland, briar and matagouri. Based on aerial photo interpretation good examples of more representative shrubland vegetation is present on south facing slopes on the true left of the

Branch Burn and Macdonalds Creek. This vegetation is excluded from the clearing activities.

2.1.2 LENZ Unit K3.3b

Indigenous vegetation representative of LENZ unit K3.3b is fescue tussock grassland, often including speargrass, groves of matagouri and shallow Carex swamps. Some scrub raking is proposed in LENZ unit K3.3b adjacent to the lower reaches of the Branch Burn and Macdonalds Creek. The original ecological report indicates this area is dominated by introduced grasses, briar and scattered matagouri bushes rather than intact shrubland stands of indigenous species.

Table 1: LENZ Units and threat categories

LENZ Unit	% Indigenous Cover Remaining	% Protected	Threat Category	Location
K3.3b	7.3	1.3	Acutely threatened	Valley floors
N4.1d	18.6	2.3	Chronically threatened	1, 2, 3 and 4
Q1.1b	77.1	11.99	Underprotected	12
Q1.1c	91.23	19.26	Underprotected	12
Q2.2a	39.92	5.07	Critically underprotected	6, 7, 8, 9, 10, 11 and 12

Notes: 1 = Boundary Paddocks; 2= Dark Side Downs; 3= Road Face; 4= Downs; 5=Branch Creek Paddocks; 6= Pipeline; 7= Middle; 8=Dead horse; 9=Macdonalds; 10=McPhees; 11=Top Block; 12=Boundary Creek, Mt Cardrona, Blue Slips, Long ZGully and Staircase

2.2 Threatened Flora and Fauna

2.2.1 Flora

Olearia lineata is listed as at risk “declining” in the 2009 threatened and uncommon plant list (de Lange *et. al.* 2009). It is understood *Olearia lineata* is present in riparian shrubland of the Branch Burn which is excluded from clearing activities.

Carmichealia crassicaule is listed as at risk “declining” in the 2009 threatened and uncommon plant list (de Lange *et. al.* 2009). It is understood *Carmichaelia crassicaule* is present in upland and subalpine environments and is not present in the clearing areas.

Leptinella serullata is listed as naturally uncommon in the 2009 threatened and uncommon plant list (de Lange *et. al.* 2009) and is expected to be found in the upland tussock grassland areas outside proposed clearing areas.

2.2.2 Fauna

Birds

The New Zealand Falcon (*Falco novaeseelandiae*) is expected to be present throughout the property and will prey on passerines that inhabit shrublands. Maintenance of patches of shrubland as undertaken by Branch Creek Station is necessary to ensure the longterm viability of the falcon population.

Invertebrates

The DoC has identified a range of threatened invertebrates that are hosted by *Olearia spp.* that are present in riparian areas of Branch Creek. As detailed above, the *Olearia* populations lie outside the clearance area and no disturbance to host specific invertebrates is expected as a result of the clearing application.

Freshwater Fish

The non-migratory galaxiid sp. D is listed to be in gradual decline (Hitchmough, 2007) and is present in the Branch Burn and Macdonalds Creek. As discussed previously the riparian vegetation associated with both watercourses are excluded from the clearing application, therefore the risk to the galaxiid habitat is considered low.

4.0 Conclusions and Recommendations

In summary the areas proposed for clearing are focussed on the control of briar, matagouri, gorse/broom and bracken fern. All clearing areas have had a long history of disturbance and the vegetation to be disturbed is not the representative vegetation of the LENZ environment. All threatened species recorded on the property lie outside the clearance areas and any additional populations are also expected to be present outside the clearing areas. Based on the above the clearing associated with the consent application is expected to have a low impact on the ecology of Branch Creek Station.

Based on the ecological review the following recommendations are made:

- Key areas of ecological value in close proximity to the clearing areas have been identified on the site plans and marked as areas A, B and C. Branch Creek has excluded all areas but these are included for the reference of Branch Creek.
- DES recommends the consent should be granted for 20 years with a review condition that allows for the review of the consent should new ecological information become available that may indicate a change in the level of ecological impact from the clearing activities.

5.0 References

de Lange, P. J; Norton, D. A; Courtney, S. P; Heenan, P. B; Barkla, J. W; Cameron, E. K; Hitchmough, R; Townsend, A. J (2009). Threatened and uncommon plants of New Zealand (2008 revision). New Zealand Journal of Botany, 47:61-96.

Hitchmough, R; Bull, L and Cromarty, P comps (2007). New Zealand Threat Classification System lists 2005. Wellington, Department of Conservation. 134pp.

Leathwick, J.; Wilson, G.; Rutledge, D.; Wardle, P.; Morgan, F; Johnston, K.; McLeod, M. and Kirkpatrick, R. (2003). *Land Environments of New Zealand.* David Bateman Ltd., Auckland.

Patrick, B. H. (1994a). *Valley Floor Lepidoptera of Central Otago*. Otago Conservancy Miscellaneous Series 19. Department of Conservation, Dunedin. 54pp.


2906121200 - 1624 & 1624A Cardrona Valley Road, Cardrona - PART 1
B
B
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A
See attached Farm Map - this is not very useful as it doesn't show boundaries and is quite difficult to be accurate.
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QUEENSTOWN LAKES DISTRICT COUNCIL
Author: R Dolan
Scale: 1: 0
Queenstown Lakes District Council - Aerial photos:
Queenstown, Wanaka and Frankton urban photo scale - flown 2007
Frankton Arm and Lake Hayes urban photo scale - flown 2004
Albert Town, Cardrona and Skippers Road urban photo scale - flown 2004
District wide rural photo scale - flown 2005-2008
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QUEENSTOWN LAKES DISTRICT COUNCIL

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DECISIONS OF THE QUEENSTOWN LAKES DISTRICT COUNCIL

NOTIFICATION UNDER s95 AND DETERMINATION UNDER s104

RESOURCE MANAGEMENT ACT 1991

Applicant:	Alphaburn Station Limited
RM reference:	RM150057
Application:	Application under Section 88 of the Resource Management Act 1991 (RMA) for a land use consent to undertake the clearance of indigenous vegetation at Glendhu Station, Alpha Burn Station and Damper Bay.
Location:	Glendhu, Alpha Burn and Damper Bay area, Wanaka
Legal Description:	Alpha Burn Station: Lot 2-4 Deposited Plan 426944 held in Computer Freehold Register 506953 Glendhu Holdings Limited: Section 1 SO 347712 held in Computer Freehold Register 602578 Damper Bay Estates Limited: Lot 1 Deposited Plan 337193 held in Computer Freehold Register 152547
Zoning:	Rural General
Activity Status:	**Restricted Discretionary**
Decision Date	11 May 2015

SUMMARY OF DECISIONS

1. Pursuant to sections 95A-95F of the RMA the application will be processed on a **non-notified** basis given the findings of Section 6.0 of this report. This decision is made by Adonica Giborees, Senior Planner, on 8 May 2015 under delegated authority pursuant to Section 34A of the RMA.

2. Pursuant to Section 104 of the RMA, consent is **GRANTED SUBJECT TO CONDITIONS** outlined in **Appendix 1** of this decision imposed pursuant to Section 108 of the RMA. The consent only applies if the conditions outlined are met. To reach the decision to grant consent the application was considered (including the full and complete records available in Council's electronic file and responses to any queries) by Adonica Giborees, Senior Planner, as delegate for the Council.

1. PROPOSAL AND SITE DESCRIPTION

Consent is sought to undertake indigenous vegetation clearance in the order of 2,706 hectares over three landholdings used by the applicant for pastoral farming. The landholdings are legally described on the preceding page and are illustrated in the maps in Figures 1-3 in the following pages.

The applicant owns Alpha Burn Station, and the owners of the remaining two areas comprising the application site, Glendhu Holdings Limited and Damper Bay Estates, have provided written consent to the proposed activity.

The proposed vegetation clearance will primarily consist of native bracken fern (*Pteridium esculentum*) on moderate to steep hill slopes to facilitate stock access and pastoral grass growth. It is proposed to clear the indigenous vegetation by helicopter spray application of the herbicide Metsulfuron.

Given the areas proposed to be sprayed it is likely to include the clearance of some isolated, individual native shrub species.

The application is supported by an assessment by botanist Dr Peter Espie, and the application has been reviewed by the Council's consultant ecologist Davis Consulting Group. The Davis Consulting Group assessment is attached as Appendix 2.

The applicant has volunteered a number of matters to avoid or mitigate adverse effects on the environment. These include providing a buffer area to exclude spraying at least 20 metres from water bodies, or boundaries with adjoining conservation land or parts of the application site protected under Queen Elizabeth II (QE II) conservation covenant registered on the Computer Freehold Register(s) of the site(s). In addition, spraying will only occur in calm conditions to optimise placement, effectiveness and minimise drift.

A site visit was undertaken by helicopter on 24 April 2015, accompanied by the Council's ecologist and the applicant. The site visit assisted with the clarification of areas to be excluded and provided the opportunity to gauge the likely occurrence of isolated native shrubs amidst the bracken fern that would be cleared.

Figures 1-3 below show the area of the total landholdings. The maps provided by Dr Espie that form part of the application show the sites, areas to be cleared, QE II conservation covenant land and adjoining conservation land. However, the applicable maps, referenced below are those produced by Davis Consulting because they contain modifications to the 'original' application plans prepared by Dr Espie.

The applicable maps form part of the Davis Consulting Group's comments, referenced:

- Attachment A: Glendhu Station – Areas of Proposed clearance and areas of no clearance'
- Attachment B: Alpha Burn Station – Areas of proposed clearance and areas of no clearance'
- Davis Consulting Group Ltd, Document ID: 15013

Figure 1. The part of the application site held under the Damper Bay Estates, Lot 1 DP 337193 held in CFR 152547.

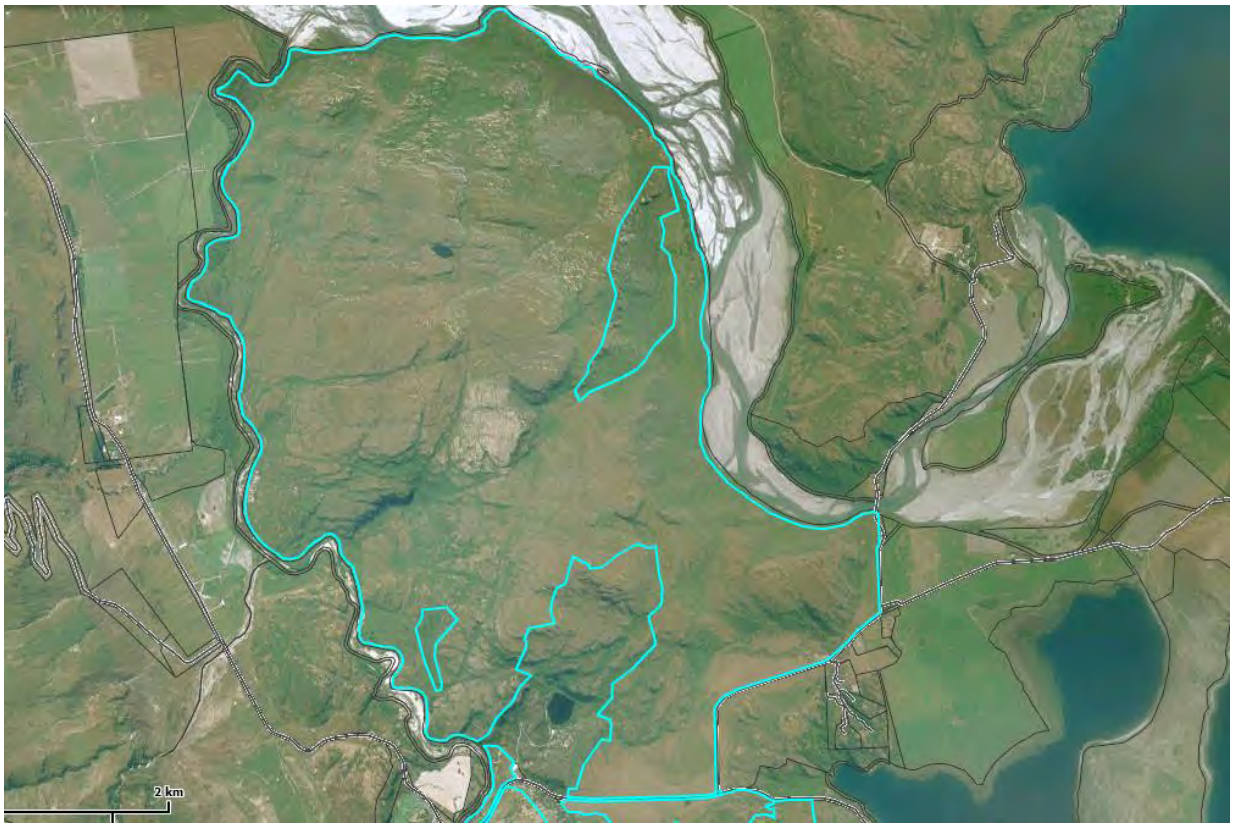


Figure 2. The part of the application site held under the Glendhu Holdings Limited Section 1 SO 347712 CFR 602578. The land parcels within the larger site are conservation land owned by the Department of Conservation. The plans provided by Davis Consulting Group accurately identify the conservation land and areas to be excluded from clearance.

Figure 3. The part of the application site held under Alpha Burn Station Limited Lots 2-4 DP 426944 held in CFR 506953.

The areas to be cleared constitute moderate to steep slopes with a low intensity pastoral character. Vegetation comprises regenerating native bracken fern and pockets of native tree and shrub species. The gullies and riparian areas contain stands of native tree species. Much of the adjoining land on higher elevations is conservation land or owned by the applicant and protected by a QE II conservation covenant.

Alpha Burn Station has recently completed tenure review. The applicant notes that this is one of the reasons why the native bracken fern has regenerated because the areas were not cleared awaiting the outcome of the tenure review process.

2. ACTIVITY STATUS

2.1 THE DISTRICT PLAN

The subject site is zoned Rural General and the proposed activity requires resource consent for the following reason:

- A **restricted discretionary** activity pursuant to Rule 5.3.3.3(xi) as the proposal breaches site standard 5.3.5.1(x)(i) and (ii) which limit clearance to areas totally surrounded by pasture and other exotic species and the permitted clearance of indigenous vegetation to 0.5 hectares. It is proposed to clear native bracken fern in the order of 2,706 hectares that is likely to include some isolated, individual native shrub species.

The proposal complies with the remaining qualifiers of the rule because the proposed clearance:

(iii) will be less than 1070 above sea level; and

(iv) will be more than 20 metres from a water body; and

(v) is unlikely to include a threatened species in Appendix 9 of the District Plan.

The Council shall restrict the exercise of its discretion in relation to this matter to its effect on nature conservation, landscape and visual amenity values and the natural character of the rural environment as set out in the assessment matters contained in 5.4.2.3[xxviii] of the District Plan.

3. SECTION 95A NOTIFICATION

The applicant has not requested public notification of the application (s95A(2)(b)).

No rule or national environmental standard requires or precludes public notification of the application (s95A(2)(c)). However, it is noted that pursuant to section 5.3.4(e) of the District Plan, '*Non - Notification of Applications'*, the clearance of indigenous vegetation under site standard 5.3.5.1(x) which is not of ecological significance in accordance with assessment criteria detailed in stage 3 (headed 'assessment') of Appendix 5, need not be notified, unless the Council considers special circumstances exist in relation to any such application.

The consent authority is not deciding to publicly notify the application using its discretion under s95A(1) and there are no special circumstances that exist in relation to the application that would require public notification (s95A(4)).

A consent authority must publicly notify an application if it decides under s95D that the activity will have or is likely to have adverse effects on the environment that are more than minor (s95A(2)(a)).

An assessment in this respect follows.

4. ASSESSMENT OF EFFECTS ON THE ENVIRONMENT (s95D)

4.1 MANDATORY EXCLUSIONS FROM ASSESSMENT (s95D)

A: Effects on the owners or occupiers of land on which the activity will occur and on adjacent land (s95D(a)).

*B: The activity is a **restricted discretionary** activity, so that adverse effects which do not relate to a matter of **discretion** have been disregarded (s95D(c)).*

C: Trade competition and the effects of trade competition (s95D(d)).

*D: The following persons have provided their **written approval** and as such adverse effects on these parties have been disregarded (s95D(e)).*

Person (owner/occupier)	Address (location in respect of subject site)
Department of Conservation	Adjoining conservation land
Glendhu Holdings Limited; Bob and Pam Mcrae	Application site
Damper Bay Estates Limited; Mark Taylor	Application Site

4.2 PERMITTED BASELINE (s95D(b))

The consent authority **may** disregard an adverse effect of the activity if a rule or national environmental standard permits an activity with that effect. In this case it is permitted to clear up to 0.5 hectares of indigenous vegetation provided the clearance complies with a prescribed set of qualifiers:

- area is totally surrounded by pasture and other exotic species,
- the area is less than 1070m above sea level,
- more than 20 metres from a water body, and
- not listed as a threatened species in Appendix 9 of the District Plan.

Given the scale of the clearance the permitted baseline is not of any particular relevant. However it is noted that the applicant has deliberately excluded water bodies and volunteered a buffer of 20 metres in an effort to comply with District Plan provisions, where possible.

4.3 ASSESSMENT: EFFECTS ON THE ENVIRONMENT

Taking into account sections 4.1 and 4.2 above, the following assessment determines whether the activity will have, or is likely to have, adverse effects on the environment that are more than minor.

The assessment matters are in clause 5.4.2.3 (xxviii) of the District Plan and are addressed as follows.

(a) The nature of the clearance, including:

(i) The amount of land to be cleared.

(ii) The timing of clearance.

(iii) The time since the site was last cleared.

(iv) The form of clearance, whether by burning, spraying or mechanical.

(v) The type of vegetation to be cleared, and the purposes of such clearance.

(vi) Whether a favourable ecological report has been submitted.

The nature of the clearance and the amount of land to be cleared has been described above. The applicant has proposed aerial spraying for accuracy and effectiveness in favour over burning due to the topography and proximity to adjoining public conservation and QE II conservation covenant land.

The land was last cleared prior to the land tenure review process, in the order of ten years ago. Prior to this, the land was cleared on a regular basis, being regularly top dressed and over sown since 1969, and burnt and/or sprayed.

An ecological report by Dr Peter Espie has been submitted with the application that identifies the plants likely to be cleared. In addition, the Council's consultant ecologist, Davis Consulting Group has visited the site and provided comments on the application. While the scope of the assessments vary, both Dr Espie and Davis Consulting Group's findings of the proposed activity are favourable in the context of the relevant District Plan assessment matters.

(b) The effect of the activity on the ecological values of the site and surrounding environment, including:

Davis Consulting Group have made the following comments with regard to the following assessment matters:

(i) The degree of modification of the site and surrounding area.

> *"The pre-human settlement vegetation associated with the hill slopes and gullies surrounding Glendhu Bay would have consisted primarily of beech forest (Leathwick et al. 2003). Remaining beech forest is now found within the gully systems. The vegetation assessment states that only bracken fern and sweet briar, including some isolated, individual native shrub species (e.g. matagouri (Discaria toumatou) and Coprosma species) will be aerially sprayed. However large areas of land were identified as management areas for spraying. The attached plans provide clarification of the areas within which bracken and briar will be sprayed and that the land containing beech forest and grey shrubland will not be sprayed (i.e. the areas of no clearance).*
>
> *According to the updated vegetation assessment there has been a long history of disturbance and modification to the vegetation within the clearance areas, which were regularly sprayed and burnt prior to Tenure Review. Also, the areas on Alphaburn Station have been oversown and top-dressed (OSTD) annually since 1969, while Glendhu Station was OSTD this year. During Tenure Review bracken fern has established, however, little to no native regeneration has occurred through the fern.*

The surrounding area is generally pastoral vegetation on the valley floor, while the land above the clearance areas includes a QEII Covenant, Conservation Covenants and DOC public conservation land. The assessment notes that there will be a 20 m buffer between spraying activity and all conservation land."

The assessment above is accepted and adopted for the purpose of this report, and it is concluded that the adverse effects on the environment are not likely to be more than minor.

(ii) The ecological values of the site, based on the Criteria listed in Appendix 5 of the Plan:

i. Representativeness

Dr Espie notes that the proposed clearance area does not contain one of the best examples of bracken or indigenous grassland, shrubland or forest communities in the Lake Hawea/Upper Clutha area. Davis Consulting Group concur, although having regard to the Wanaka Ecological District.

ii. Rarity

Davis Consulting Group note that given the original extent of the clearance areas and the QLDC ecological records of threatened plants in the vicinity, the presence of threatened plant species is unlikely.

There is one record of *Olearia hectorii* within a clearance area on Glendhu Station and two more close by, however all other records of threatened species lie outside the clearance areas. The beech forest and grey shrubland within the 'no clearance areas' will provide habitat for the prey of the 'At Risk' eastern New Zealand falcon, which is recorded within neighbouring conservation land.

Davis Consulting Group's assessment has had regard to the threatened environment classification developed by Landcare Research. The threat classification is based on the percentage of indigenous vegetation remaining within a land environment and the percentage that is formally protected. Davis Consulting Group note that the clearance areas are situated in environments that are listed as 'critically underprotected' and the percentage of indigenous vegetation remaining on this land environment is estimated to be 40 – 45 %, with only 2 – 5 % having any formal protection.

The clearance areas are not within chronically or acutely threatened environments and areas of remnant indigenous vegetation (i.e. the beech forest) are excluded from the clearing application. This is considered an important mitigating factor.

Overall, adverse effects with regard to rarity of the indigenous vegetation clearance are not likely to be more than minor.

iii. Diversity and Pattern

Davis Consulting Group note that the inclusion of the gully systems within defined areas of no clearance allows the retention important habitat sequence. This is considered an important mitigating factor and adverse effects in this respect are not likely to be more than minor.

iv. Distinctiveness/Special Ecological Character

Dr Espie states the bracken and modified grasslands in the areas to be cleared, do not have any special distinctiveness or ecological features. No effects are anticipated in this respect.

(v) Size and Shape

Davis Consulting Group notes that the size of the area of disturbance is relatively large however the proposed disturbance areas have a long history of agricultural activity and vegetation clearance.

(vi) Connectivity

Davis Consulting Group note that the area is connected to much larger surrounding areas of semi-natural to natural vegetation within gullies and at higher altitudes, including conservation land. However, the gullies excluded from clearance activities provide for native vegetation, and a wildlife corridor, to remain across the altitudinal sequence. Adverse effects in terms of connectivity with surrounding areas as a result of the proposed clearance of indigenous vegetation are not likely to be more than minor.

(iii) The extent to which the activity threatens the indigenous plants or animals/birds identified at the site.

Davis Consulting Group have made the following comments:

> *"The proposed clearance activity will aerially spray the herbicide metsulfuron to kill bracken fern, which is a non-threatened native species. All recorded threatened species, except one Olearia hectorii, are outside the clearance areas on the attached plans. The bracken fern observed during the site visit had limited native regeneration. The applicant has recognised the importance of native vegetation and excluded areas of beech forest and grey shrubland, as well as only spraying bracken fern within the clearance areas. It is unclear the impact aerial spraying will have on fauna, however it is likely that indigenous invertebrates and lizards are present on the site and will be effected by the proposed activities."*

The assessment above is accepted and adopted for the purpose of this report, and adverse effects on the environment are not likely to be more than minor.

(iv) The extent to which the site and surrounding environment is sensitive to modification.

The applicant and Davis Consulting Group discussed the identified sensitive areas identified as gully systems containing beech forest, grey shrubland and, areas of manuka or kanuka. The applicant has volunteered to exclude these areas from spraying. The spraying is to be undertaken using precise Global Positioning System (GPS) controlled boundary recognition. The method provides confidence that these areas will not be accidentally sprayed, and will ensure that effects on the site and surrounding environment are mitigated to the extent that they are no more than minor.

(v) The potential to adversely affect the natural character of the margins of any river, stream, lake or wetland.

A 20m buffer area from water bodies has been identified and the applicant has agreed to exclude more prominent gully systems, as defined on the plans prepared by Davis Consulting Group. This will ensure that the natural character of the margins of water bodies are not adversely affected.

(vi) The proximity of any area protected under covenant or other protection mechanism.

There are conservation covenants and public conservation land neighbouring both Alpha Burn and Glendhu Station. These areas of conservation land contain native vegetation and threatened species. The proximity to the clearance activities is indicated on the plans prepared by Davis Consulting Group and a 20 m buffer will be observed between any conservation land and proposed spraying activity to ensure effects on any covenanted areas are appropriately avoided.

(c) The effect of vegetation clearance on landscape and visual amenity values, including:

(i) The extent to which indigenous vegetation is an integral part of, or enhances, the landscape values and natural character of the area.

(ii) The visibility of the site from transport routes, townships, and other tourist destinations, including ski fields.

(iii) The landscape values of the site and surrounding environment, and its sensitivity to modification.

The sites are located within an Outstanding Natural Landscape and parts of them will be visible from Wanaka-Mt Aspiring Road, Lake Wanaka, the Matukituki River and the Glendhu Bay Camp Ground.

The visual effects of spraying will be evident where the green, live foliage of the bracken fern would turn brown and pasture grasses would prevail. This may be accentuated where certain areas are sprayed on a rotational basis, giving rise to blocks or patches of bracken fern, dead bracken fern and pasture grasses on the hill slopes. The spraying would occur up to an elevation of 800m on moderate to steep slopes. While visible, the change would not be discordant with traditional low intensity pastoral farming.

Stands of established forest and shrubland, riparian areas and a 20 metre buffer would not be cleared. In this regard the adverse effects on landscape and visual amenity of more sensitive areas with higher nature conservation values would be avoided.

While there has not been clearance of bracken fern on these slopes for some time, the property has an established history of pastoral farming and vegetation clearance. The valley floors are extensively modified and comprise pastoral farming activities at a higher intensity than the hill and mountain slopes.

The adverse effects on landscape and visual amenity values of the Outstanding Natural Landscape within which the subject sites are located are not likely to be more than minor.

(d) The degree to which the clearance will adversely affect natural features, geomorphological or geological sites.

The vegetation is being sprayed to facilitate dieback of bracken fern to enable stock passage and over sowing. The physical disturbance to landforms or geological features will be low, if any. Adverse effects in this respect are not likely to be more than minor.

(e) The degree to which any possible alternative locations or methods for undertaking the activity could occur.

The areas proposed to be cleared are currently grazed. Alternative locations are not a viable option.

(f) The degree to which clearance will enable the efficient use of the land for production purposes.

The clearance of the indigenous bracken will allow for stock passage and the regrowth of pasture – thereby ensuring the efficient use of the land for production purposes.

(g) The degree to which the clearance will result in a loss of natural character and/or any recreational values associated with any nearby waterbody.

The applicant has volunteered a 20 metre wide buffer from waterbodies, and restricted clearance to the ridges of larger gully systems as identified on the plans prepared by Davis Consulting Group. This will assist in mitigating any potential adverse effects of the clearance on any natural and or recreational values associated with water bodies, including Lake Wanaka, and the Motatapu and Matukituki Rivers.

Summary

Given the assessment above, the adverse effects on the environment in terms of indigenous biodiversity, nature conservation values, landscape and visual amenity values are not likely to be more than minor.

4.4 DECISION: EFFECTS ON THE ENVIRONMENT (s95A(2))

Overall the proposed activity is not likely to have adverse effects on the environment that are more than minor.

5.0 EFFECTS ON PERSONS

Section 95B(1) requires a decision whether there are any affected persons (under s95E) in relation to the activity. Section 95E requires that a person is an affected person if the adverse effects of the activity on the person are minor or more than minor (but not less than minor).

5.1 MANDATORY EXCLUSIONS FROM ASSESSMENT (s95E)

*A: The activity is a **restricted discretionary** activity, so that adverse effects which do not relate to a matter of **discretion** have been disregarded (s95E(2)(b)).*

*B: The persons outlined in section 4.1 above have provided their **written approval** and as such these persons are not affected parties (s95E(3)(a)).*

5.2 PERMITTED BASELINE (s95E(2)(a))

The consent authority **may** disregard an adverse effect of the activity on a person if a rule or national environmental standard permits an activity with that effect. In this case the permitted baseline is found within section 4.2 above.

5.3 ASSESSMENT: EFFECTS ON PERSONS

For the reasons set out above, the adverse effects on any persons will be less than minor.

5.4 DECISION: EFFECTS ON PERSONS (s95B(1))

In terms of Section 95E of the RMA, no person is considered to be adversely affected.

6.0 OVERALL NOTIFICATION DETERMINATION

Given the decisions made above in sections 4.4 and 5.4 the application is to be processed on a non-notified basis.

7.0 S104 ASSESSMENT

7.1 EFFECTS (s104(1)(a))

Actual and potential effects on the environment have been outlined in section 4 of this report. Conditions of consent can be imposed under s108 of the RMA as required to avoid, remedy or mitigate adverse effects.

7.2 RELEVANT DISTRICT PLAN PROVISIONS (s104(1)(b)(vi))

The relevant objectives and policies are contained within Part 4 – *District Wide Issues*, and Part 5 – *Rural Areas* of the District Plan.

District Wide Issues

Natural Environment Objective 1 – Nature Conservation Values seeks to protect and enhance indigenous ecosystems, and maintain communities and divert of indigenous flora and fauna within the District; to improve opportunity for linkages between habitat communities; to protect outstanding natural features and landscapes.

Landscape and Visual Amenity Objective seeks to ensure that use of land in the district is undertaken in a manner that avoids, remedies or mitigates adverse effects on landscape and visual amenity values.

Rural Areas

Objective 1 - *Character and Landscape Value* seeks to protect character and landscape value to the rural area by promoting sustainable management if natural and physical resources and control of inappropriate activities.

Objective 2 - *Life Supporting Capacity of Soils* seeks to retain the life supporting capacity of soils and/or vegetation in the rural area so that they are safeguarded to meet the reasonably foreseeable needs of future generations.

Objective 3 - *Rural Amenity* seeks to avoid, remedy or mitigate adverse effects of activities on rural amenity.

The proposed indigenous vegetation clearance is not at odds with these objectives and policies. The proposed clearance is sympathetic to areas that are likely to contain higher indigenous biodiversity values than the native bracken fern.

Overall, the proposal is not inconsistent with the relevant objectives and policies of the District Plan.

7.3 PART 2 OF THE RMA

Section 6, Matters of National Importance requires consideration of significant indigenous vegetation and habitats of indigenous fauna. The proposed activity does not involve the clearance of significant indigenous vegetation, and the retention of indigenous vegetation within the gully systems with water bodies helps maintain habitat of indigenous fauna, and connections to the adjoining public conservation and QE II conservation land.

The clearance would not have inappropriate adverse effects on the District's outstanding natural landscapes and features. Overall, the proposed activity recognises and provides for matters of national importance.

The activity also accords with Section 7 (aa) *the ethic of stewardship* and Section 7 (b) *the efficient use and development of natural and physical resources.* The applicant has proposed responsible methods of clearance, while continuing established land uses to improve the efficiency of the land.

Overall, and for the reasons outlined in the above assessment, the application as proposed is considered to be consistent with the purpose and principals set out in Part 2 of the RMA. The proposal will result in sustainable management of natural and physical resources, whilst also not affecting the life supporting capacity of ecosystems, and avoiding, remedying or mitigating adverse effects on the environment.

7.4 DECISION ON RESOURCE CONSENT PURSUANT TO SECTION 104 OF THE RMA

Consent is **granted** subject to the conditions outlined in *Appendix 1* of this decision report imposed pursuant to Section 108 of the RMA.

8.0 OTHER MATTERS

Local Government Act 2002: Development Contributions

This proposal is not considered a "Development" in terms of the Local Government Act 2002 as it will not generate a demand for network infrastructure and reserves and community facilities.

Administrative Matters

The costs of processing the application are currently being assessed and you will be advised under separate cover whether further costs have been incurred.

The Council will contact you in due course to arrange the required monitoring. It is suggested that you contact the Council if you intend to delay implementation of this consent or if all conditions have been met.

This resource consent must be exercised within five years from the date of this decision subject to the provisions of Section 125 of the Resource Management Act 1991.

If you have any enquiries please contact Craig Barr on phone (03) 441 0499 or email craig.barr@qldc.govt.nz.

Report prepared by

Craig Barr
SENIOR PLANNER

Decision made by

Adonica Giborees
SENIOR PLANNER

APPENDIX 1 - Consent Conditions
APPENDIX 2 - Davis Consulting Group 'Review of Alpha Burn Vegetation Clearance Assessment for RM150057'

APPENDIX 1 – CONSENT CONDITIONS

General Conditions

1. That the development must be undertaken/carried out in accordance with the plans:

   - 'Attachment A: Glendhu Station – Areas of Proposed clearance and areas of no clearance'
   - 'Attachment B: Alpha Burn Station – Areas of proposed clearance and areas of no clearance'

   Prepared by Davis Consulting Group Ltd, Document ID: 15013

   stamped as approved on 8 May 2015

   and the application as submitted, with the exception of the amendments required by the following conditions of consent.

2a. This consent shall not be exercised and no work or activity associated with it may be commenced or continued until the following charges have been paid in full: all charges fixed in accordance with section 36(1) of the Resource Management Act 1991 and any finalised, additional charges under section 36(3) of the Act.

2b. The consent holder is liable for costs associated with the monitoring of this resource consent under Section 35 of the Resource Management Act 1991 and shall pay to Council an initial fee of $100. This initial fee has been set under section 36(1) of the Act.

Indigenous Vegetation Clearance

3. The consent holder shall ensure that a 20 m buffer is observed on all boundaries of waterbodies and wetlands, as well as any boundaries with conservation land (e.g. Queen Elizabeth II covenants, Department of Conservation public conservation land and conservation covenants).

4. The consent holder shall ensure that, within the clearance areas indicated on the approved plans, only stands of bracken fern are to be aerially sprayed. The following stands of vegetation shall be excluded:

   I. All stands of forest;

   II. All stands of shrubland;

   III. There shall be no clearance above 800 metres.

Monitoring

5. The consent holder (or their agent) shall submit a map to Council in the month of August (commencing 2015) each year outlining all clearance that has taken place in the previous 12 months. If no clearance has taken place, the applicant shall inform the Council in writing that no clearance has occurred.

Consent Duration

6. This consent will lapse 20 years from the date of this decision

Review

7 Within ten working days of each anniversary of the date of this decision the Council may, in accordance with Sections 128 and 129 of the Resource Management Act 1991, serve notice on the consent holder of its intention to review the conditions of this resource consent for any of the following purposes:

(a) There is or likely to be an adverse environmental effect as a result of the exercise of this consent, which was unforeseen when the consent was granted.

(b) Monitoring of the exercise of the consent has revealed that there is or is likely to be an adverse effect on the environment.

(c) There has been a change is circumstances such that the conditions of the consent are no longer appropriate in term sot eh purpose of the RMA 1991.

(d) To ensure ecological information pertaining to the continually updated threatened flora and fauna species list is taken into account and threatened flora and fauna species are protected on the application site.

(e) With respect to the following conditions:
   I. Condition 3 relating to any clearance of vegetation within the buffer area of water bodies and the exclusion areas on the approved plans.
   II. Condition 4 relating to the exclusion of stands of indigenous vegetation other than native bracken fern.

Advice Notes

1. The consent holder is advised that, within the exclusion areas on the approved maps clearance of weed species can occur, and that this consent does not restrict the continual clearance of plant species that are not indigenous.

APPENDIX 2 - DAVIS CONSULTING GROUP 'REVIEW OF ALPHA BURN VEGETATION CLEARANCE ASSESSMENT FOR RM150057

4 May, 2015

Queenstown Lakes District Council,
Private Bag 50072,
Queenstown 9348.

Attn: Craig Barr.

Re: Review of Alphaburn Vegetation Clearance Assessment for RM150057: Resource Consent to Clear Indigenous Vegetation.

1.0 INTRODUCTION

On behalf of the Queenstown Lakes District Council (QLDC), Davis Consulting Group Ltd (DCG) has completed a review of the Vegetation Clearance Assessment lodged in support of a resource consent application for the clearance of indigenous vegetation within Alphaburn and Glendhu Stations. DCG undertook a site visit on the 24th of April 2015 with the applicant and a council representative to gain a better understanding of the area of vegetation to be cleared. The revised plans are attached at the rear of this document. Based on these plans and site visit, DCG understands the proposed vegetation clearance will consist of the localised aerial spraying of native bracken fern (*Pteridium esculentum*), which may include some isolated, individual native shrub species. The clearance is for the purpose of pastoral management including pasture growth and stock access.

The following review of the Vegetation Clearance Assessment, using the attached plans, specifically addresses the assessment criteria listed under 5.4.2.3 (xxviii) of the QLDC's operative District Plan.

2.0 REVIEW OF THE VEGETATION CLEARANCE ASSESSMENT

Six assessment matters are listed in the District Plan and each matter is addressed below.

2.1 *The degree of modification of the site and surrounding area.*

The pre-human settlement vegetation associated with the hill slopes and gullies surrounding Glendhu Bay would have consisted primarily of beech forest (Leathwick *et al.* 2003). Remaining beech forest is now found within the gully systems. The vegetation assessment states that only bracken fern and sweet briar, including some isolated, individual native shrub species (e.g. matagouri (*Discaria toumatou*) and Coprosma species) will be aerially sprayed. However large areas of land were identified as management areas for spraying. The attached plans provide clarification of the areas within which bracken and briar will be sprayed and that the land containing beech forest and grey shrubland will not be sprayed (i.e. the areas of no clearance).

According to the updated vegetation assessment there has been a long history of disturbance and modification to the vegetation within the clearance areas, which were regularly sprayed and burnt prior to Tenure Review. Also, the areas on Alphaburn Station have been oversown and top-dressed (OSTD) annually since 1969, while Glendhu Station was OSTD this year. During Tenure Review bracken fern has established, however, little to no native regeneration has occurred through the fern.

The surrounding area is generally pastoral vegetation on the valley floor, while the land above the clearance areas includes a QEII Covenant, Conservation Covenants and DOC public conservation land. The assessment notes that there will be a 20 m buffer between spraying activity and all conservation land.

2.2 *The ecological values of the site based on the criteria listed in Appendix 5 of the District Plan.*

The following addresses the key criteria set out in the District Plan.

1. Representativeness – Whether the area contains one of the best examples of an indigenous vegetation type, habitat or ecological process which is typical of its Ecological District.

Based on the attached plans and the clearance of only bracken fern with limited natural regeneration occurring, we concur with the vegetation assessment that the area does not contain

one of the best examples of bracken fern communities in the Wanaka Ecological District (Figure 1).

Figure 1: Representative photo of bracken fern with limited natural regeneration on Glendhu Station.

2. Rarity - Whether the area supports or is important for the recovery of, an indigenous species, habitat or community of species which is rare or threatened within the Ecological District or is threatened nationally.

The vegetation assessment only addresses rarity with regard to plant species and does not address rarity with respect to vegetation communities or habitats.

Plant Species and Habitat

The vegetation assessment indicates that no threatened species were observed in the clearance areas. Given the original extent of the clearance areas and the QLDC ecological records of threatened plants in the vicinity, the presence of threatened plant species is unlikely. The subsequent clarification of the areas for clearance means that any rare or threatened plant species are most likely located within the defined areas of no clearance. There is one record of *Olearia hectorii* within a clearance area on Glendhu Station and two more close by, however all other records of threatened species lie outside the clearance areas. The beech forest and grey

shrubland within the no clearance areas will provide habitat for the prey of the ‘At Risk’ eastern New Zealand falcon, which is recorded within neighbouring conservation land.

Threatened Environments

The threatened environment classification developed by Landcare Research circa 2007 has been utilised in the proposed National Policy Statement on Biodiversity and is widely used by ecological professionals throughout New Zealand. The threat classification is based on the percentage of indigenous vegetation remaining within a land environment and the percentage that is formally protected. The clearance areas are situated in environments that are listed as ‘critically underprotected’ and the percentage indigenous vegetation remaining on this land environment is estimated to be 40 – 45 %, with only 2 – 5 % having any formal protection.

The vegetation assessment excludes the threatened environment classification from the assessment. In our view the threatened environment classification is a very useful tool when assessing the rarity of a community and habitat proposed for disturbance. Notwithstanding this point, the clearance areas are not within chronically or acutely threatened environments and areas of remnant indigenous vegetation (i.e. the beech forest) are excluded from the clearing application.

3. Diversity and Pattern - the degree of diversity exhibited by the area in vegetation, habitat types, ecotones, species and ecological processes.

The application does not address the ecological diversity and pattern provided by the altitudinal sequence of native vegetation from valley floor to mountain peak within the gully systems. The inclusion of the gully systems within defined areas of no clearance on the attached plans, allows the retention of this important habitat sequence.

5. Size and Shape

The size of the area of disturbance is relatively large however the proposed disturbance areas have a long history of agricultural activity and vegetation clearance.

6. Connectivity

The area is connected too much larger surrounding areas of semi-natural to natural vegetation within gullies and at higher altitudes, including conservation land. However, the gullies excluded from clearance activities provide for native vegetation, and a wildlife corridor, to remain across the altitudinal sequence.

2.3 *The extent to which the activity threatens the indigenous plants or animals/birds identified at the site.*

The proposed clearance activity will aerially spray the herbicide metsulfuron to kill bracken fern, which is a non-threatened native species. All recorded threatened species, except one *Olearia hectorii*, are outside the clearance areas on the attached plans. The bracken fern observed during the site visit had limited native regeneration. The applicant has recognised the importance of native vegetation and excluded areas of beech forest and grey shrubland, as well as only spraying bracken fern within the clearance areas.

It is unclear the impact aerial spraying will have on fauna, however it is likely that indigenous invertebrates and lizards are present on the site and will be effected by the proposed activities.

2.4 *The extent to which the site and surrounding environment is sensitive to modification.*

Ecologically sensitive areas were not defined within the vegetation assessment and the additional update to the assessment did not contain the gully systems or any acknowledgement of why they should not be excluded from spraying. Ecologically sensitive areas on Glendhu and Alphaburn Stations were identified during DCG's site visit and excluded from any spraying activity. These include the gully systems, which contain native beech forest and grey shrubland, as well as areas of manuka/kanuka. The aerial spraying is to be undertaken using 'precise GPS controlled boundary recognition', which will help ensure the areas of no clearance can be observed.

2.5 *The potential to adversely affect the natural character of the margins of any river, stream, lake or wetland.*

The vegetation assessment only identified some waterbodies and that a 20 m buffer would be observed during spraying activities. The attached plans show waterbodies and wetlands present based on topographical maps. If waterbodies and wetlands are present within clearance areas, a 20 m buffer on either side should be adhered to during spraying.

2.6 *The proximity of any area protected under covenant or other protection mechanism.*

There are conservation covenants and public conservation land neighbouring both Alphaburn and Glendhu Station. These areas of conservation land contain native vegetation and threatened species. The proximity to the clearance activities is indicated on the attached plans and a 20 m buffer will be observed between any conservation land and proposed spraying activity.

3.0 SUMMARY AND RECOMMENDATIONS

Based on our review of the proposed vegetation clearing application and the attached plans, DCG concludes the following:

- The vegetation proposed for spraying consists of bracken fern communities and has a long history of disturbance and modification. Areas of dense native beech forest and grey shrubland are excluded from proposed spraying activities;
- It is unlikely that the bracken fern contains rare or threatened plant species and most are likely to be located within the areas of no clearance;
- The clearance areas lie within a 'critically underprotected' environment, however, only bracken fern communities are proposed to be aerially sprayed and there is limited regeneration occurring within the bracken fern observed. Moreover, the areas of remnant indigenous vegetation within Alphaburn and Glendhu Stations (i.e. beech forest) is within the areas of no clearance;
- Given the proximity of the proposed spraying activity to areas of native vegetation, conservation covenants and waterbodies including wetlands, we recommend the following consent conditions are included along with the attached plans, to clarify the proposed activity:
    - A 20 m buffer must be observed on all boundaries of waterbodies and wetlands, as well as any boundaries with conservation land (e.g. QEII covenants, DOC public conservation land and conservation covenants); and,
    - Within the clearance areas indicated on the attached plans, only stands of bracken fern are to be aerially sprayed.

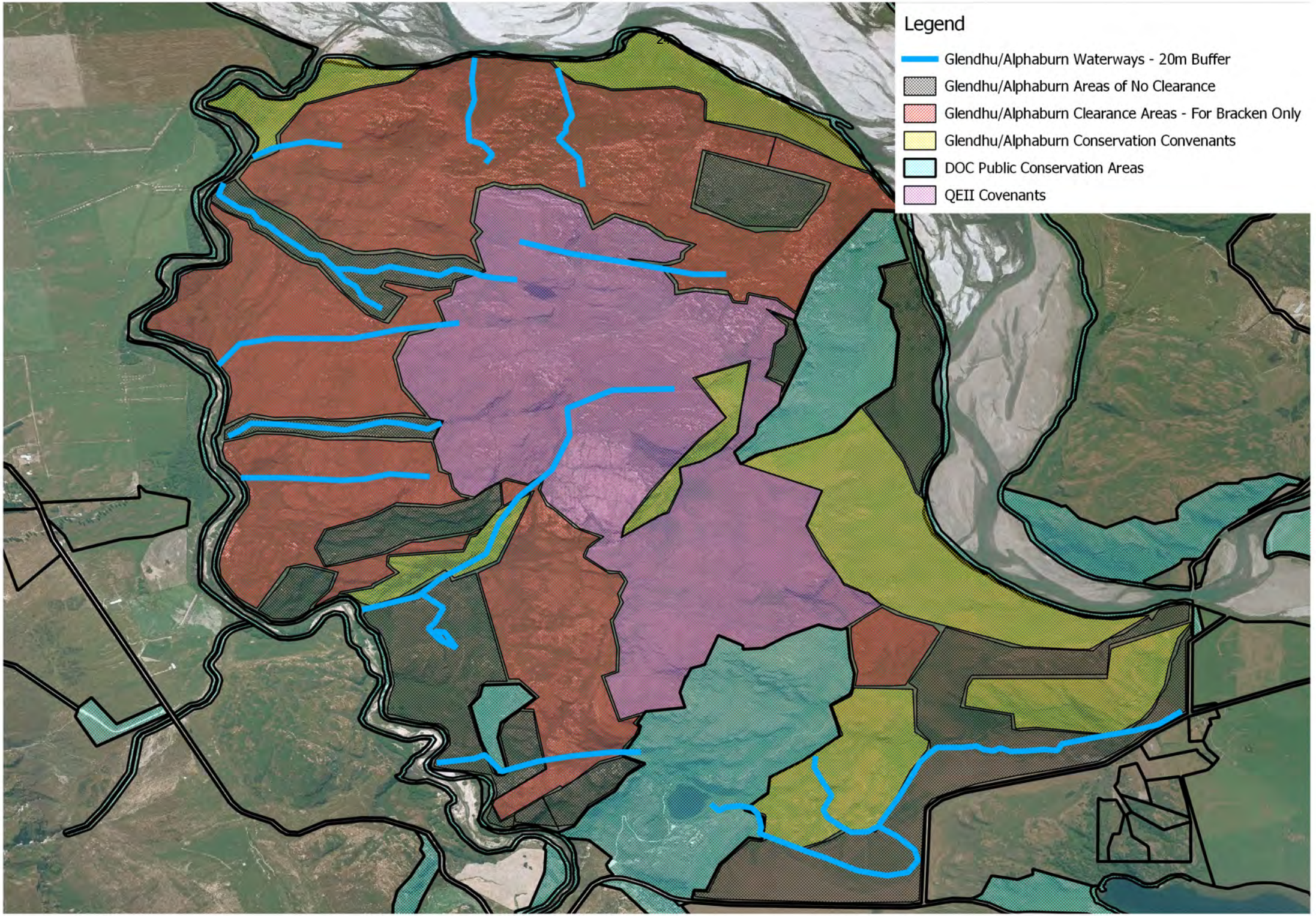
We conclude that the proposed spraying of bracken fern is unlikely to have an effect on the ecological values of the ecological district.

Please feel free to contact us should you require any further information or wish to discuss this matter in more detail.

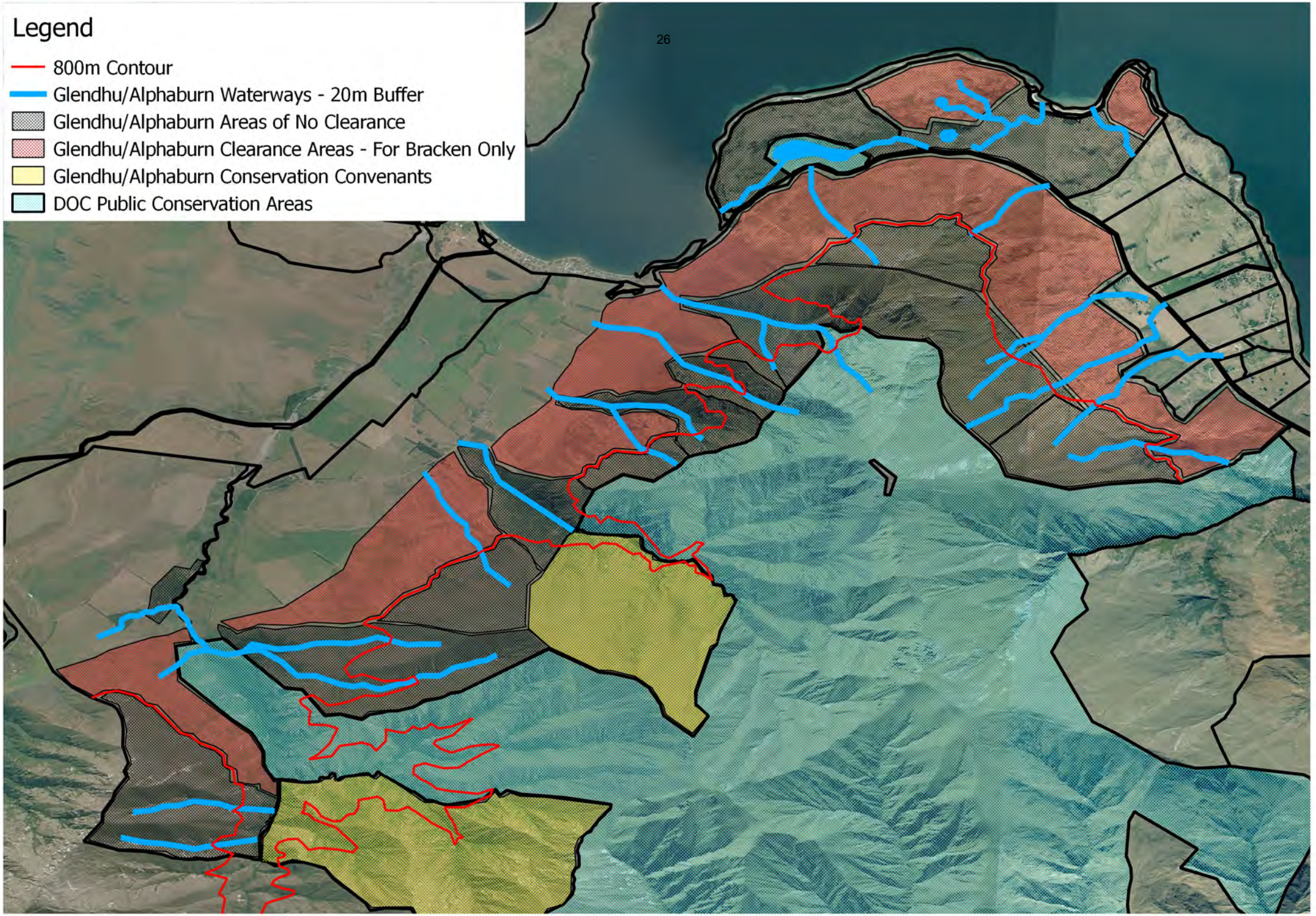
Yours sincerely,

Glenn Davis.
Principal Environmental Scientist.

Attachment A: Glendhu Station – Areas of proposed clearance and areas of no clearance.


Legend
Glendhu/Alphaburn Waterways - 20m Buffer
Glendhu/Alphaburn Areas of No Clearance
Glendhu/Alphaburn Clearance Areas - For Bracken Only
Glendhu/Alphaburn Conservation Convenants
DOC Public Conservation Areas
QEII Covenants

Attachment B: Alphaburn Station – Areas of proposed clearance and areas of no clearance.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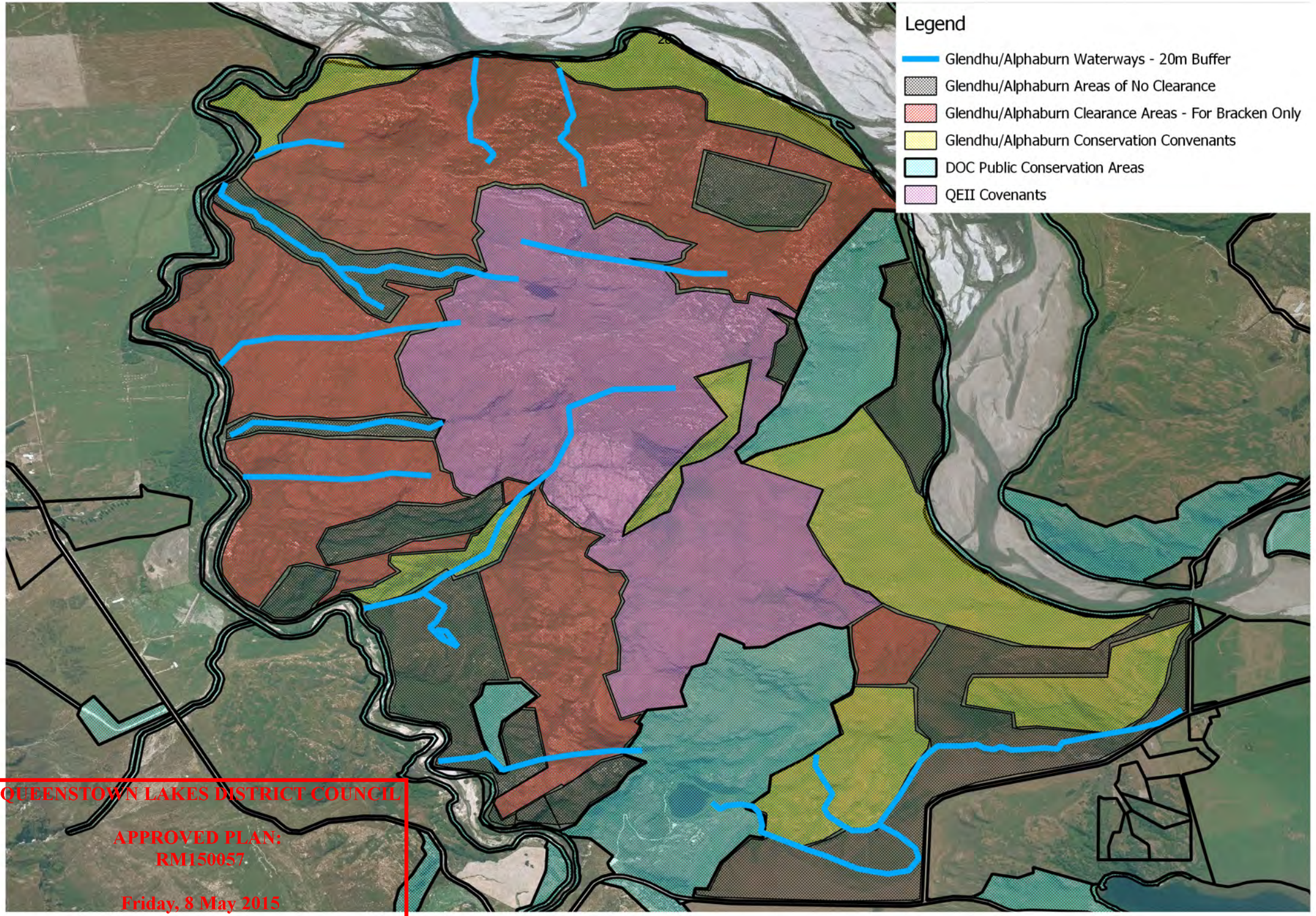
800m Contour
Glendhu/Alphaburn Waterways - 20m Buffer
Glendhu/Alphaburn Areas of No Clearance
Glendhu/Alphaburn Clearance Areas - For Bracken Only
Glendhu/Alphaburn Conservation Convenants
DOC Public Conservation Areas

Attachment A: Glendhu Station – Areas of proposed clearance and areas of no clearance.



QUEENSTOWN LAKES DISTRICT COUNCIL

APPROVED PLAN:
RM150057

Friday, 8 May 2015

Attachment B: Alphaburn Station – Areas of proposed clearance and areas of no clearance.

QUEENSTOWN LAKES DISTRICT COUNCIL

APPROVED PLAN:
RM150057

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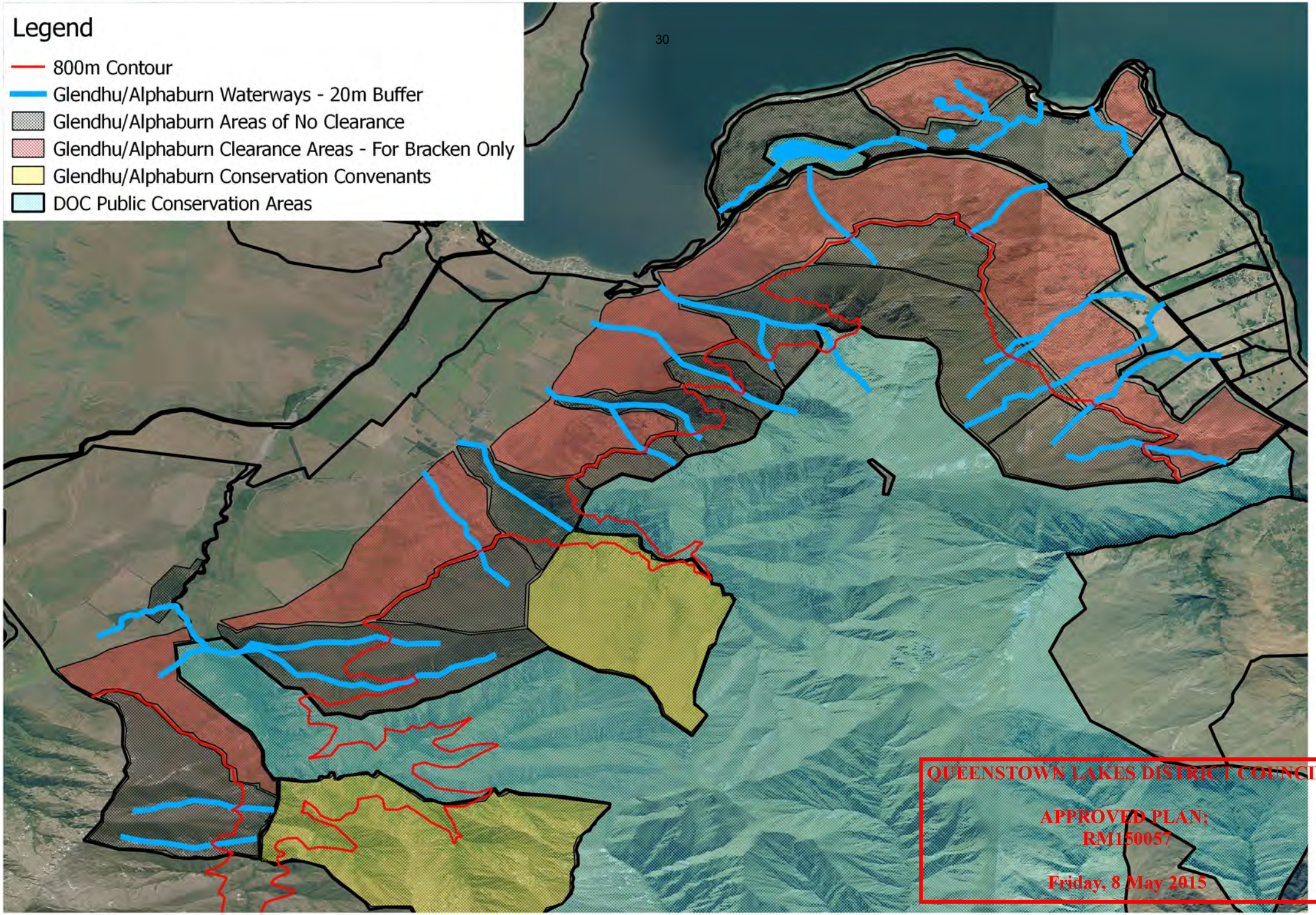
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Glendhu/Alphaburn Conservation Convenants
DOC Public Conservation Areas
30
QUEENSTOWN LAKES DISTRICT COUNCIL
APPROVED PLAN:
RM150057
Friday, 8 May 2015

Ecological Memorandum

Title: Mt Burke Station Vegetation Clearing Consent Application – Ecological Update

Consent Application Number: RM090623

Date: 15 September 2009

1.0 Introduction

The following ecological memo has been prepared to update the ecological report submitted with the Mt Burke Station vegetation clearing consent application. The update is based on the review of threatened flora and fauna databases and review of threatened Land Environment New Zealand (LENZ) units. The update also considers the Ministry for the Environment (MfE) national priority statements for the protection of threatened native biodiversity on private land (published in 2007) and the ecological impact based on an ecological impact matrix attached to this memo.

2.0 Land Environments New Zealand and Threatened Flora and Fauna

2.1 Land Environments New Zealand

A description of LENZ and its application to New Zealand's biodiversity needs is attached to this memo. Table 1 below shows the LENZ units within the clearance blocks. Three of the LENZ units (N4.1d, N5.1c and K3.3a) on Mt Burke Station contain indigenous vegetation that is less than 20% of the original cover. These are discussed below.

2.1.1 LENZ Unit N4.1d

Indigenous vegetation representative of LENZ unit N4.1d is kanuka, matagouri, small leaved coprosmas and olearias, *Carmichaelia* spp. and kowhai (Leathwick *et. al.* 2003). The vegetation within LENZ unit 4.1d has had a long history of disturbance and is now dominated by short tussock grassland, pasture grassland, bracken fern and manuka woodland and

regenerating shrubland. The short tussock grassland, pasture grassland and bracken fern communities are not representative of the pre-settlement vegetation in this LENZ environment. Based on DoC tenure review report it is understood that the best quality shrublands are adjacent to the lakeshore and lie within the marginal strip which is outside the application area. Further, shrublands at the southern end of the Peninsula in LENZ unit 4.1d are excluded from clearing activities and will be incorporated into a conservation covenant.

2.1.2 LENZ Unit N5.1c

Indigenous vegetation representative of LENZ unit 5.1c is short tussock grassland with areas of kanuka woodland (Leathwick et. al. 2003). This LENZ unit is located near the mouth of East Wanaka Creek and the flat valley floor both sides of Quartz Creek. The existing vegetation is dominated by developed pasture grassland, however there are areas of kanuka/manuka woodland near the mouth of East Wanaka Creek, adjacent to Quartz Creek and fragmented stands that function as shelter belts within the developed paddocks both sides of Quartz Creek.

The kanuka/manuka woodland adjacent to East Wanaka Creek has been excluded from clearing activities. Although the kanuka/manuka woodland is fragmented near Quartz Creek it is recommended that Mt Burke Station continues to maintain as much of this vegetation as possible given the very restricted distribution of representative vegetation in this LENZ environment.

2.1.3 LENZ Unit K3.3b

Indigenous vegetation representative of LENZ unit K3.3b is fescue tussock grassland, often including speargrass, groves of matagouri and shallow Carex swamps. Most of the clearing areas on Mt Burke Station lie outside this LENZ unit, however limited areas are located on low lying areas adjacent to Maungawera Valley Road and the lower reaches of Quartz Creek. The vegetation within this LENZ unit is dominated by developed pasture grassland, however some fragmented kanuka/manuka stands that function as shelter belts are present.

2.1.4 LENZ Unit Q2.2a, Q2.2b

Indigenous vegetation representative of LENZ units Q2.2a and Q2.2b is beech forest. Remnant beech forest remains on Mt Burke and is predominantly situated in deep gullies protected from fire. Pre-european fires removed much of the beech cover which allowed the expansion of woodland into these environments. The vegetation cover in these environments are now dominated by short tussock grassland, bracken fern, manuka/kanuka

woodland, grey shrubland and mixed hardwood shrubland. Most of the clearing activities will focus on the control of bracken fern however some stands of manuka/kanuka woodland and regenerating hardwood shrubland is proposed for clearing via burning in all blocks. It is noted that during the tenure review process the Department of Conservation identified most of the high value shrublands and woodland on Mt Burke Station and as a result large areas are excluded from clearing activities ensuring the maintenance of associated ecological values.

2.1.5 LENZ Unit P5.1e

Indigenous vegetation representative of LENZ unit P5.1e is beech forest. Most of the beech forest had been removed in fires before the arrival of Europeans which allowed the expansion of woodland into this environment. Woodland, short tussock grassland and bracken fern dominates this LENZ unit today.

Clearing activities are predominantly outside this environment and most of the clearing will be focussed on control of bracken fern which is not representative of this LENZ Unit.

3.0 Threatened Flora and Fauna

No threatened flora or fauna have been recorded within the proposed clearing areas.

DES notes that kowhai (*Sophora microphylla*), halls totara (*Podocarpus hallii*) and mountain toatoa (*Phyllocladus alpinus*) are present on Mt Burke Station. Although not listed as nationally threatened all have a severely restricted distribution in the Wanaka Ecological District from their original extent.

Kea is listed as nationally endangered (Hitchmough et al., 2007) and is expected to be present in subalpine areas of the property outside of the clearance areas.

The Eastern falcon (*Falco novaeseelandiae*) and South Island Rifleman are listed to be in gradual decline (Hitchmough et al., 2007) and are present in bush patches and shrubland throughout Mt Burke Station. All the forest areas and large areas of shrubland lie outside the clearing areas, therefore the risk to falcon and rifleman from the clearing activities is considered to be low.

Table 1: LENZ Units, threat categories and representative vegetation

LENZ Unit	% Indigenous Cover Remaining	% Protected	Threat Category	Pre-settlement Vegetation	Location on Mt Burke Station
N4.1d	18.6	2.3	Chronically threatened	Short tussock grassland and scattered shrubland	South face of Mt Brown low altitude areas adjacent to the shoreline on Peninsula
N5.1c	2.7	0.8	Acutely threatened	Short tussock grassland and scattered shrubland	Near mouth of East Wanaka Creek and low lying developed areas near quartz creek
K3.3a	7.3	1.3	Acutely threatened	Short tussock grassland and scattered matagouri	Low lying developed areas north and east of Mt Burke Station homestead
Q2.2a	39.92	5.07	Critically underprotected	Beech forest	Mid altitude faces throughout Mt Burke Station between 600 and 900masl
Q2.2b	39.92	5.07	Critically underprotected	Beech forest	Low altitude faces throughout Mt Burke Station between 400 and 600masl
P5.1e	86.02	32.12	Comparatively safe from clearance	Beech forest	Mid altitude faces through Mt Burke Station

4.0 Ecological Impact Assessment

An ecological impact assessment matrix is attached to this memo. The site plans showing the clearance block boundaries and exclusion areas are also attached. The ecological impact from the proposed clearing activities in each block is discussed below.

4.1 Peninsula

Vegetation clearing on the Peninsula will focus on the clearance of bracken fern, however, areas of manuka/kanuka shrubland, regenerating broadleaf indigenous hardwoods and matagouri dominated shrubland will also be disturbed. It is noted that areas of bluffs and rock outcrops are also present on the Peninsula, however these areas are expected to provide indigenous flora and fauna refuge from burning activities.

During the tenure review process the DoC noted particularly intact shrubland remnants occur on the southern point of the peninsula, toward the NW end of the peninsula and next to the lakeshore in the marginal strip. All areas are excluded from clearing. Notwithstanding these exclusion areas, a review of aerial photographs indicates manuka/kanuka woodland and grey shrubland and regenerating broadleaf indigenous hardwood stands persist in riparian areas and as intact stands. The shrublands are not representative of pre-settlement vegetation but closed canopy shrubland stands will create a litter layer that is critical for invertebrates and subsequently insectivorous birds and falcon.

The clearing of bracken fern is considered to have a low ecological effect and clearing of shrublands can be considered to have a moderate ecological effect.

4.2 Stevensons Arm

The majority of the Stevensons Arm clearing area has been heavily modified and clearance is largely focussed on the clearance of regenerating bracken fern. Manuka/kanuka is also regenerating and control of these stands is also proposed. Most intact shrubland stands have been excluded from clearing including an area of kanuka in an acutely threatened environment adjacent to the mouth of East Wanaka Creek. Exclusion of clearing from East Wanaka Creek ensures a sequence of indigenous vegetation extends from the lake shore through to subalpine grasslands.

The clearing of bracken fern and regenerating manuka/kanuka woodland is considered to have a minor effect on the ecology of Stevensons Arm.

4.3 Spud Pits

The Spud Pit block has been intensively developed to approximately 500 masl. This area consists of developed pasture with highly fragmented stands of manuka/kanuka woodland. Between 500 – 800 masl the terrain steepens and the vegetation is dominated by intact stands of manuka/kanuka woodland, bracken fern and short tussock grassland. During the tenure review process the DoC identified a diverse range of shrublands in the Quartz Creek East Branch and all of this area is excluded from clearing activities. In addition an area of shrubland containing halls totara and kowhai to the west of Little Mt Maude has been excluded from clearing.

Notwithstanding the above, the clearing application proposes to clear intact stands of mature manuka/kanuka woodland which contain a range of indigenous species including manuka, kanuka, *Coprosma* spp. matagouri, *Carmichaelia petriei, Olearia nummularifolia.* Although this vegetation is unlikely to be representative of pre-settlement vegetation in this environment, these mature stands will provide habitat for a range of indigenous invertebrates and birds and therefore clearance will have a moderate ecological effect. It is noted that much of the mountain area to the north and west of the Spud Pits block contains a diverse range of woodland and shrubland and is excluded from clearing activities; therefore the risk of any loss of vegetation communities, habitats or flora and fauna from Mt Burke Station is low.

4.4 Lake Hawea Faces

The Lake Hawea block is dominated by bracken fern, short tussock grassland and mature and regenerating manuka/kanuka woodland. In addition a woodland of halls totara and mountain toatoa is also present but has been excluded from the clearing activities.

The clearing of bracken fern and regenerating manuka/kanuka woodland is expected to have a low ecological impact however clearing of mature stands closed canopy stands of manuka/kanuka woodland will have a moderate ecological effect.

5.0 Conclusions and Recommendations

In summary the areas proposed for clearing are focussed on the control of bracken fern, regenerating shrubland and mature kanuka/manuka woodland. All clearing areas have had a long history of disturbance, however the mature manuka/kanuka stands have not been disturbed for some time (> 20 years) and are expected to be ecologically functional and self

sustaining habitats. Large areas of the property are excluded from clearing including diverse interior shrublands, lakeshore margins and subalpine environments therefore most of the ecological values associated with the property are protected from clearing activities.

Based on the ecological review the following recommendations are made:

- Exclusion of shrubland marked on the attached plans;
- DES recommends the consent should be granted for 20 years with a review condition that allows for the review of the consent should new ecological information become available that may indicate a change in the level of ecological impact from the clearing activities.

5.0 References

Hitchmough, R; Bull, L and Cromarty, P comps (2007). New Zealand Threat Classification System lists 2005. Wellington, Department of Conservation. 134pp.

Leathwick, J.; Wilson, G.; Rutledge, D.; Wardle, P.; Morgan, F; Johnston, K.; McLeod, M. and Kirkpatrick, R. (2003). *Land Environments of New Zealand.* David Bateman Ltd., Auckland.

Map 8 of 8 - Mt Burke Station

QUEENSTOWN LAKES DISTRICT COUNCIL

Author:

Scale: 1: 15000

Queenstown Lakes District Council - Aerial photos:

Queenstown, Wanaka and Frankton urban photo scale - flown 2007
Frankton Arm and Lake Hayes urban photo scale - flown 2004
Albert Town, Cardrona and Skippers Road urban photo scale - flown 2004

District wide rural photo scale - flown 2005-2008

Land Parcels
Roads
Contours

Blk 4 Lake Hawea

Area's for clearing

Area's excluded.

Map produced from Intramap on: Wed Jun 24 12:00:11 2009

Information derived from QLDC's GIS. Coordinates are NZGD 2000, Projection is NZ Transverse Mercator.

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Map 4 of 8 - Mt Burke Station

0 500 1000 meters

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QUEENSTOWN LAKES DISTRICT COUNCIL

Author:

Scale: 1: 15000

Queenstown Lakes District Council - Aerial photos:

Queenstown, Wanaka and Frankton urban photo scale - flown 2007
Frankton Arm and Lake Hayes urban photo scale - flown 2004
Albert Town, Cardrona and Skippers Road urban photo scale - flown 2004
District wide rural photo scale - flown 2005-2008

Land Parcels
Roads
Contours

BLK 2 - Shotover's Arm

Areas for clearing
Areas excluded.

Map 5 of 8 - Mt Burke Station

0 1000 2000 meters

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QUEENSTOWN LAKES DISTRICT COUNCIL

Author:

Scale: 1: 15000

Queenstown Lakes District Council - Aerial photos:

Queenstown, Wanaka and Frankton urban photo scale - flown 2007
Frankton Arm and Lake Hayes urban photo scale - flown 2004
Albert Town, Cardrona and Skippers Road urban photo scale - flown 2004
District wide rural photo scale - flown 2005-2008

Land Parcels
Roads
Contours

Areas for clearing
Areas excluded

Map 1 of 8 - Mt Burke Station

0 500 1000 meters

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QUEENSTOWN LAKES DISTRICT COUNCIL

Author:

Scale: 1: 15000

Queenstown Lakes District Council - Aerial photos:

Queenstown, Wanaka and Frankton urban photo scale - flown 2007
Frankton Arm and Lake Hayes urban photo scale - flown 2004
Albert Town, Cardrona and Skippers Road urban photo scale - flown 2004

District wide rural photo scale - flown 2005-2008

Area for clearing

Area's excluded.

Land Parcels
Roads
Contours

BIKI Peninsula.

Map produced from Intramap on: Wed Jun 24 10:59:54 2009

Information derived from QLDC's GIS. Coordinates are NZGD 2000, Projection is NZ Transverse Mercator.

APPENDIX 5

Glenn Davis - Additional Information Request from Hearings Panel – Queenstown Lakes District Proposed District Plan (*Hearing panel questions*)

30 May 2016

Queenstown Lakes District Council
By Email
Attn: Craig Barr.

Re: Additional Information – Queenstown Lakes District Proposed District Plan

Peter Espie evidence:

1. Provide feedback on the usefulness and certainty of Rules 33.3.3.2 and 33.3.3.3 (i.e. 20% - 30%) in light of P. Espie evidence.

See point 3 below.

2. Comment on the appropriateness of LENZ and TEC in light of P. Espie's evidence.

LENZ and the threatened environment classification (TEC) have not been used and are not proposed to be used in isolation as suggested by Dr Espie's evidence. However, when used alongside research into the pre-settlement distribution of indigenous vegetation and local ecological knowledge, the TEC is a useful district wide tool to provide context for the assessment of rarity of indigenous vegetation that remains in the district. Furthermore, the TEC highlights the areas in the district where vegetation cover is very restricted from its original distribution with these areas likely to support a disproportionately large percentage of New Zealand's most seriously threatened species, habitats and ecosystems (Walker, 2005).

The TEC is widely used by district and regional councils, ecological practitioners and the Department of Conservation. The Otago Regional Council adopts the use of LENZ and TEC in Schedule 5 of the Regional Policy Statement that sets out the criteria for the assessment of significance of indigenous vegetation and habitats. Furthermore, LENZ and TEC are adopted in the Statement of National Priorities (MfE and DOC, 2007) with National Priority 1 promoting the protection of indigenous vegetation associated with land environments (LENZ) that have 20% or less remaining in indigenous cover.

The PDP uses the TEC to support a tiered approach to the application of the vegetation clearing rules by reducing the permitted area of clearance in lowland environments where indigenous vegetation cover has been reduced to less than 20% of its original extent. The 20% indigenous vegetation cover remaining level has been adopted as species loss has been shown to accelerate when the area of habitat remaining falls below 20% (Statement of National Priorities, 2007 (see Appendix C); Walker *et. al.*, 2015). This approach is consistent with regional and national policies.

There are limitations with LENZ, as inherent in all scientific models. These limitations have been documented in LENZ supporting documentation. The authors of LENZ promote the use of LENZ down to a scale of 1:50,000 and also note that ground truthing is necessary to support decision making. I agree that LENZ and the TEC should not be used in isolation but it has a useful and important role in providing some context around percentage indigenous cover remaining across the district. This is a context that cannot be provided in a site ecological assessment or an assessment of neighbouring vegetation but remains an important consideration, particularly in lowland environments where the remaining indigenous cover is often highly restricted.

3. Comment on the merits of Espie's tripartite (1/3, 1/3, 1/3) as an alternative to Rules 33.3.3.2 and 33.3.3.3

The problem with Dr Espie's proposal is that it provides no definition around what 'modified semi natural' vegetation constitutes indigenous vegetation. It also appears to promote a tiered approach to the assessment of ecological values and assumes 'modified semi natural' vegetation is not as valuable as vegetation that has a high degree of naturalness. This is not consistent with our understanding of ecological value, ignores the concept of ecosystem rarity and would not promote maintenance of the districts biodiversity. It is much better to provide a definition of indigenous vegetation (as set out in the PDP) and then undertake an assessment of ecological values on their merits.

Adequacy of Protection

Dr Espie states he considers "vegetation subject to clearance must be evaluated against what is already protected on the basis of actual vegetation or species information. Only if it is not adequately protected does it require further protection".

I consider the assessment of the adequacy of protection needs to be much broader than an assessment of the vegetation remaining or species already protected. This approach ignores the considerable loss of indigenous cover that has occurred particularly in our lowland environments. We have to be able to provide context regarding the original extent of indigenous vegetation and habitats. LENZ and TEC is a best tool available to provide this context.

DOC evidence (L. Barea evidence):

4. Provide feedback on the proposed policy and schedule.

Para. 47: I support the proposed alternative text for Policy 33.2.1.8, with a minor amendment to the first line, whereby 'significant indigenous vegetation or indigenous fauna' is reworded to 'indigenous biodiversity', to encompass all biodiversity values. The alternative policy provides a clear structure for managing the impacts of proposed activities within the District.

Para. 49: I support the inclusion of the Biodiversity Offsets definition. It provides required clarity and understanding around Policy 33.2.1.8.

Para. 50: if compensation is to be included in Policy 33.2.1.8, then I agree that the definition provided must be included in the Plan. However, I think that compensation should not be included because it does not align with the Objective (33.2.1) in that it does not require a measurable and long-term biodiversity improvement.

Para. 51: I support the framework/schedule proposed. It provides clarity, understanding and consistency as to how biodiversity offsetting will operate within the District, while being in line with national guidance.

S. Kane and P. Espie evidence:

5. Give consideration to the current practice of resource consents with regards to farm management plans (i.e. generally whole farm and for 20 year duration) recognizing practical constraints of farmers.

Between 2008 and 2010 many of the high country station vegetation clearance consents expired. During this period, I am aware of at least 20 properties that prepared vegetation clearing applications and most of these applications covered vegetation clearing that was required across the whole property. The council made the decision at this time to provide consents for 20 years so that it would provide a reasonable timeframe for the clearing activities to be undertaken and provide farm managers with more certainty regarding their farm management. Most clearing activities were associated with the clearance of bracken fern dominated vegetation that had developed through pastures and was impacting farm productivity.

The council reviewed applications and identified exclusion areas that were included in the applications. Key areas that were identified for exclusion included:

- Exclusion of well mature beech forest, dry shrubland and broadleaved indigenous hardwood communities;
- Buffer areas adjacent to waterways identified on the 1:50,000 topographic maps;
- Exclusion of representative indigenous vegetation;
- Exclusion of spraying activities in the vicinity of rocky outcrops and bluff systems; and
- Exclusion of areas where indigenous vegetation had regenerated strongly through bracken fern.

The process has essentially provided farm managers with a whole farm management plan of how they can maintain and develop pastures throughout their farms and given them a reasonable timeframe to work within.

Yours sincerely,

Glenn Davis.
Principal Environmental Scientist.