

12 October 2026

Fast-track Approvals Act Concession report

Section 51(2)(a) concession report for –
FTAA-2605-1236
Remarkables Ski Area Upgrade and Doolans Expansion



Department of
Conservation
Te Papa Atawhai

**Te Kāwanatanga
o Aotearoa**
New Zealand Government

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Introduction

1. NZSki (the applicant) seeks approvals under the Fast-track Approvals Act 2024 (FTAA) for the upgrade and development of infrastructure at the Remarkables Ski Area, and the expansion and development of ski activities, trails and associated infrastructure within the adjacent Doolans Basin, Queenstown (the Project).
2. As part of the application NZSki is seeking approvals for two concessions that would otherwise be applied for under the Conservation Act 1987.
3. On 11 June 2026, in accordance with s51 of the FTAA, the Panel Convener directed the EPA to obtain a report prepared by the Director-General of Conservation in accordance with clause 4 of Schedule 6 for concessions on Crown land.
4. The concessions are part a suite of conservation approvals sought by NZSki. For efficiency a Covering Report has been prepared that discusses matters common to the approvals sought. The DOC s51 Covering Report, including all appended material, should be read in conjunction with this report.
5. Additionally, appended to this report are:
 - Appendix A: Proposed Concession conditions - 'Remarkables Base Concession
 - Appendix B: Proposed Concession conditions - 'Doolans Concession'
 - Appendix C: s78 FTAA conditions
 - Appendix D: Existing arrangements in relation to the land

Purpose of the report

6. The report has been prepared by the Department of Conservation (DOC) on behalf of the Director-General of Conservation in response to the Panel Convenor's direction outlined above. This report provides advice to support the Panel's assessment of the application for the concession approvals.
7. In accordance with Schedule 6 Clause 9, this report also specifies conditions under section 78 of the FTAA that the Panel must impose. Section 78 conditions are those appropriate to manage the risks to, and potential liabilities of, the Crown arising from the granting of an approval.

DOC Concessions Sought

8. The application originally included:
 - a. A concession (referred to as the 'Doolans Concession') authorising all activities associated with the expansion of the ski area into the Doolans Basin, plus the supporting infrastructure that spatially traverses the applicant's existing Rastus Burn Recreation Reserve 96118-SKI concession package.
 - b. A concession authorising an expansion of the existing Rastus Burn Base Building and associated buildings and utilities located within the existing access road and Car Park 3 (referred to as the 'Remarkables Base Concession').
 - c. A variation to NZSki's existing concession 96118-SKI to remove the existing Rastus Burn Base Building from 96118-SKI, in lieu of this building being captured by the proposed new Remarkables Base Concession.
9. It subsequently came to light that a variation to a concession does not appear to be able to be applied for under the FTAA. The application to vary 96118-SKI was then withdrawn by the applicant.
10. DOC is of the view that this withdrawal does not frustrate the Panels' ability to approve the remaining two concession applications.
11. Each proposed concession is a package of a lease, a licence and easements.
12. The applicant has applied for a 40-year term for each concession.

Location in relation to Public Conservation Lands and Waters

13. The Project area (for those parts seeking concessions) spans the existing Remarkables Ski Area, up and over the ridgeline into the Doolans Basin. The ridgeline in this area is locally known as "Helicopter Ridge". Activity at the Lower Remarkables Transit Hub, which also forms part of the application, is not on lands administered by DOC.
14. The existing Remarkables Ski Area sits within the Rastus Burn Recreation Reserve (shown in blue) at Figure 1. The ridge above the Remarkables Ski Area that separates it from the Doolans Basin is in the Remarkables Conservation Area, as is the Doolans Basin (shown in apricot) at Figure 1.

15. The boundary between the two parcels of conservation lands mirrors the Queenstown Lakes District Council and Central Otago District Council boundary along this section of ridgeline.

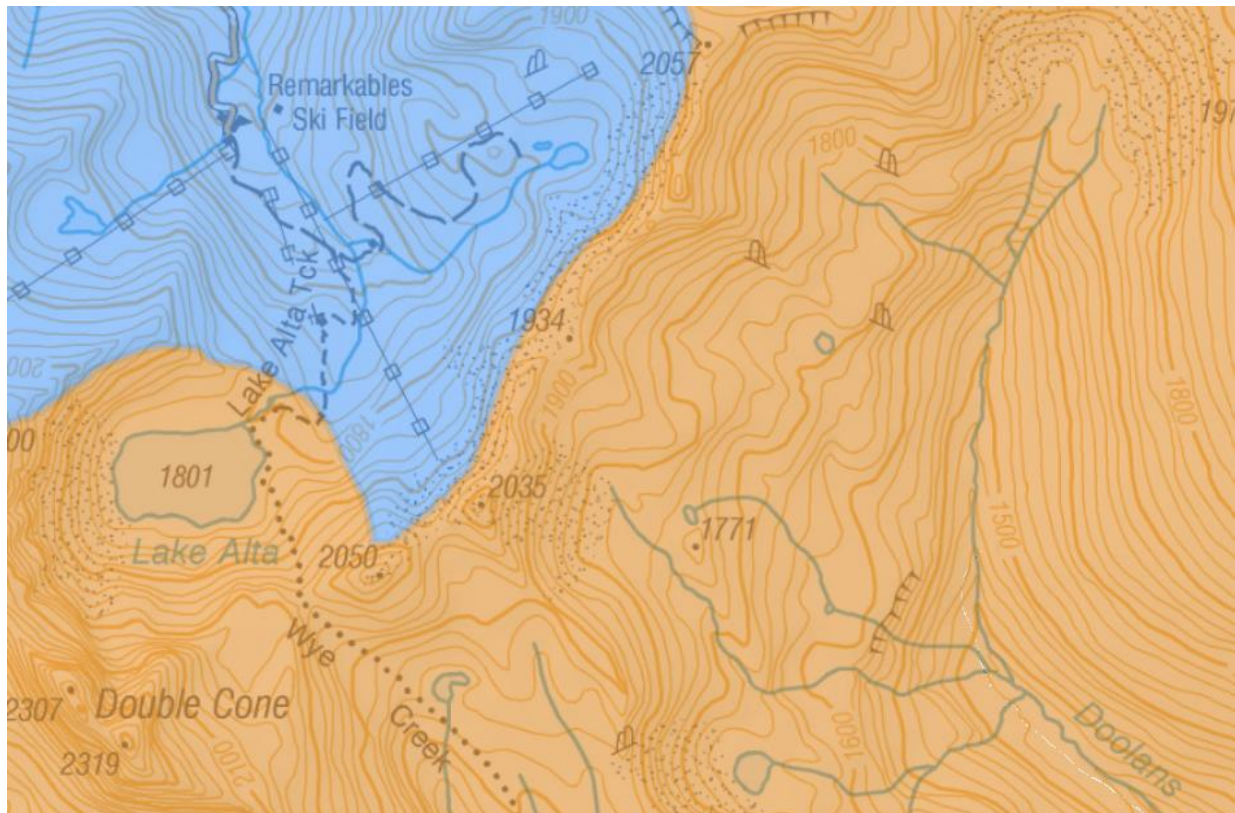


Figure 1 – Public Conservation Lands and Waters. Blue denotes the Rastus Burn Recreation Reserve, and apricot denotes the Remarkables Conservation Area. Note point 1934, demarking the ridgeline.

Overview of DOC's report

16. NZSki is seeking approvals under the FTAA to expand The Remarkables ski field into Doolan's Basin, covering approximately 262ha of public conservation land within the Rastus Burn Recreation Reserve and Remarkables Conservation Area, southeast of Queenstown.
17. Ski-fields provide important recreation opportunities and benefits across New Zealand. DOC supports ski-field developments where appropriate and where appropriate effects management strategies can maintain and improve conservation outcomes.
18. While steps have been taken by the applicant to avoid, remedy or mitigate adverse effects, DOC considers further information, assessments or the consideration of

alternatives could identify additional opportunities to avoid, remedy or mitigate adverse effects more effectively. Kā Rūnaka views will also be pertinent to this conversation.

19. A range of concerns and potential effects management opportunities have been identified by DOC's experts. In some areas, further assessments or information from the applicant could help inform alternative approaches and/or how a range of issues may be managed through suitable conditions. Noting, DOC considers there will still be residual effects.
20. DOC considers that the identification of ecological values is incomplete. Therefore, adverse effects are understated by the applicant, as is the proposed compensation. Measures to avoid, remedy and mitigate adverse effects are also not yet able to be fully determined.
21. Should the panel approve the application, compensation should focus on values and outcomes that respond to the landscape and ecosystem-level adverse effects. As it stands, DOC considers the compensation package proposed is not appropriate for the scale and scope of natural values proposed to be lost, as it will not achieve outcomes commensurate with the impacts of the project.
22. If the panel approves the application, DOC suggests conditions with its 'tracked changes' at Appendices A and B. Should relevant conditions not be imposed by the panel, DOC directs that relevant s78 conditions are imposed.
23. The Doolans Basin is an alpine environment containing a combination of geological, ecological and freshwater values. It contains well-preserved glacial landforms, nationally rare alpine ecosystems, wetlands, tarns, streams and indigenous vegetation communities that support a diverse range of native, threatened and at-risk species
24. The basin's connected sequence of ecosystems remains highly intact and close to pristine, providing a rare example of a functioning alpine ecosystem that contributes to the resilience of native species and habitats across the wider region. Many of these natural features have developed over thousands of years and cannot be readily recreated if lost or modified.
25. Impacts from the proposal are assessed in statements of advice from DOC experts that are appended to the DOC Covering Report. These are summarised in this report. DOC experts assess the project will have significant impacts on terrestrial, wetland and freshwater ecology. DOC's experts also assess there will be high impacts on landscape and existing back-country recreation. The Department's expert considers the proposal would significantly modify glacial moraine landforms in the Doolans Basin and for these to be outstanding natural features of national scientific significance. Heritage effects cannot

be fully understood because a field survey of the area of the proposed Tyrolean weir and water intake at the Doolans Creek Right Branch has not been undertaken.

26. DOC considers that further information is required in order for the panel to properly understand the full effects of what is proposed and the values affected, including alternatives to the loss of Tarn 3 for the purpose of constructing a water reservoir. In regards section 17U(4) of the Conservation Act, DOC considers that the information provided does not demonstrate that alternative water-storage locations have been sufficiently investigated within the relevant conservation areas, including locations where the potential adverse effects may be significantly less.
27. The activities proposed are largely consistent with the purpose for which the Rastus Burn Recreation Reserve is held and with the Otago Conservation Management Strategy 2016 (CMS). Appropriate environmental controls will be required to ensure this, through conditions on each of the suite of approvals sought.
28. DOC considers the activities sought at Helicopter Ridge and in the Doolans Basin are inconsistent with the purpose for which the Remarkables Conservation Area is held. DOC also considers that, while the proposed activities are consistent with some provisions of the CMS, that they are inconsistent with the key relevant Objectives, Outcomes and Policies of the CMS.
29. Longevity of the development in the face of climate change is premised on achieving suitable snow cover due to the latitude, elevation and aspect of the Doolans; and making more snow. Climate change information has been supplied by the applicant with reference to two publications from 2012. DOC suggests contemporary expert climate change information regarding ski area development on public conservation lands and waters would better inform decision making.
30. With respect to progressively making more snow over time, it is not known if more water will be able to be sourced from the Doolans Creek (or elsewhere); or where it would be stored.
31. The proposed developments expose people and infrastructure to a new set of natural hazards, such as the construction and ongoing operation of the road between the top of the Sugar Bowl and Helicopter Ridge. The available information does not establish how the residual high risk identified in the application can be appropriately managed; noting that discussions between experts were continuing when the application was lodged.

32. Other concessionaires have existing interests in the land and these are outlined in this report.

Sources

33. This report is informed by the application as lodged with the EPA on 20 May 2026 and the updated documents provided to the EPA on 4 September 2026¹ (herein referred to as the substantive application/the application).

Detailed assessment of the concession applications

34. Schedule 6, clause 4 sets out that this report must address the matters in clause 7(1) (except clause 7(1)(a)(i), (vii)(B) and (viii)(B)); and include any conditions considered appropriate to be imposed by the panel under clause 8.
35. Clause 7(1) sets out the criteria the panel must take into account, or may consider, when considering an application for a concession, giving greatest weight to the purpose of the FTAA.

Clause 7(1)(a)(ii) – Part 3B of the Conservation Act 1987

36. Part 3B of the Conservation Act 1987 (Part 3B) deals with concessions. Not all of Part 3B is relevant to an application made under the FTAA, and under the FTAA sections 17SB and 17U(3) are explicitly excluded from being taken into account.
37. The assessment below addresses what DOC considers to be the relevant sections of Part 3B for the approvals sought by this Project. This includes parts of:
- Section 17U – Matters to be considered by Minister
 - Section 17W – Relationship between concessions and conservation management strategies and conservation management plans
 - Section 17X – Power of Minister to impose and enforce conditions
 - Section 17Y – Rents, fees, and royalties
 - Section 17Z – Term of concession.
38. These are outlined in turn below.

¹ <https://www.fasttrack.govt.nz/projects/remarkables-ski-area-upgrade-and-doolans-expansion/substantive-application>

39. Note that Schedule 6 Clause 4(2) clarifies that reference to the Minister of Conservation in section 17U of the Conservation Act 1987 must be read as a reference to a Panel.

Section 17U(1)(a) - The nature of the activity and the type of structure or facility (if any) proposed to be constructed

40. The nature of the proposed activity is described in the substantive application and summarised above, and so is not repeated here.
41. The nature of the activity is familiar to DOC, noting that the activity, structures and facilities have for the most part been occurring in the Rastus Burn Recreation Reserve since the mid-1980's and under DOC administration since 1987. Concessions for three chairlifts (either new or replacement) have been granted in the Rastus Burn Recreation Reserve since 2013 along with significant trail construction, snow making, and base building redevelopments. DOC staff have been active in monitoring of construction and restoration works. Concession 96118-SKI was granted in 2025.
42. The types of structures and facilities proposed to be undertaken pursuant to each concession are described in the substantive application.

Section 17U(1)(b) - The effects of the proposed activity, structure or facility

Section 17U(1)(c) - Any measures that can reasonably and practically be undertaken to avoid, remedy or mitigate any adverse effects of the activity

Section 17U(1)(e) - Any relevant environmental impact assessment, including any audit or review

43. The substantive application includes environmental impact assessments.
44. In considering the application, DOC obtained expert statements in several areas to help inform its understanding of the application, the values at place, and the actual and potential effects of what is proposed.
45. These statements are outlined in, and appended to, the DOC Covering Report and should be read in conjunction with this report, and in particular in consideration of sections 17U(1)(b), (c) and (e).
46. DOC considers effects will be felt across the full range of matters addressed by these statements of advice and elements of the Project will have significant adverse effects on conservation values within the Doolans Basin, including in particular:
- the total loss of Tarn 3 (a naturally uncommon ecosystem)

- loss, fragmentation, hydrological disconnection and sedimentation of the wetland complex, which includes cushion bog wetland, riparian wetland and seepage (all naturally uncommon ecosystems; seepage is also an endangered ecosystem)
- permanent modification of stream habitat in the Doolans Basin tributaries, including loss of river extent, sedimentation, stormwater contamination and biosecurity risk
- loss of a considerable extent of terrestrial naturally uncommon ecosystems, such as screes of acidic rock, nested moraine, moraine bench, and wind deflation surface on the margin of the moraine bench
- operational effects from snowmaking, grooming, skiing and snowboarding, summer visitor use and road use on freshwater and vegetation values and terrestrial invertebrates – these effects are not assessed in the application
- edge effects and fragmentation, affecting vegetation and ecosystems
- invasion of weeds into alpine ecosystems
- loss of habitat for invertebrates
- landscape effects, including permanent alteration of a nationally significant moraine sequence
- potential loss of heritage site/s associated with gold mining in the area of the proposed weir and water intake at the Doolans Creek Right Branch, and
- substantial modification of existing backcountry recreation values.

47. As set out below, while some steps have been taken to avoid, remedy or mitigate adverse effects, DOC considers that further steps could be taken to avoid, remedy or mitigate these and other adverse effects of the activity (e.g. whether it is feasible to move or adapt some of the infrastructure provisions to reduce impacts).

48. Additionally, DOC considers there is further information required to properly understand the actual and potential effects of the application. This is discussed below in relation to section s17U(2)(a).

49. A summary of the statements of advice of DOC's experts, as they relate to effects on the environment and on conservation values follows:

Freshwater (Dr Christopher Kavazos)

50. The proposed activity would affect freshwater ecological values in both the Doolans Basin and the Rastus Burn, with most effects occurring in the Doolans Basin. Dr Kavazos describes the Doolans Basin as follows:

The Doolans Basin is an essentially unmodified alpine reference catchment in which streams, tributaries, tarns and wetlands form a hydrologically connected mosaic, including naturally uncommon cushion bog, seepage and string mire wetlands and tarns.

51. Effects on freshwater ecological values, and proposed or potential mitigations, are as follows.

Tarn loss

52. Tarn 3, which has an area of c. 4,450 m², is proposed to be replaced with a fully lined reservoir to store water for snowmaking. Dr Kavazos notes that this “will cause the total, permanent and irreversible loss of that ecosystem and its ecological value. ... Tarns are classified as historically rare, or naturally uncommon, ecosystems.”
53. Dr Kavazos’s view is that Tarn 3 meets the definition of a “natural inland wetland” under the National Policy Statement for Freshwater Management 2020 (this has implications for the RMA planning framework, which will be discussed in DOC’s section 53 comments). A \$20,000 contribution to boardwalk construction at Lake Alta is proposed by the applicant as compensation for this loss.

Effects on wetland complex

54. Effects on the wetland complex in the Doolans Basin (cushion bog wetland, riparian wetland and seepage - all naturally uncommon ecosystems, with seepage also classified as an endangered ecosystem) would be caused by creation of the proposed access track, ski trails and associated services corridor. This would result in the loss of approximately 0.295ha of the wetland complex, creating fragmentation and hydrological disconnection. There would also be sedimentation of the wetland complex during both construction and operation of the project.
55. The applicant has endeavoured to avoid loss of wetlands and minimise effects on hydrological connectivity by choosing a route for the track and associated infrastructure through the basin that minimises wetland disturbance.
56. Permeable track sections are proposed to maintain seepage flow across the corridor, but Dr Kavazos considers that it is uncertain whether this will be successful. If not, there could be adverse effects on wetland areas including, for peat forming and cushion communities: desiccation; peat oxidation and shrinkage; and a shift towards drier tolerant species. Changes of this kind would be progressive and require detailed monitoring to identify, and adaptive management plans to remediate. Dr Kavazos recommends that site specific designs for each permeable track section should be provided and certified before works begin.

57. There is also a risk that the services trench becomes a preferential drainage path, diverting water from its natural path. The applicant proposes the use of concrete bulkheads (trench plugs) to mitigate this risk, but Dr Kavazos considers that this method is unproven and its likely success is uncertain. He is also concerned that the pouring of concrete in situ or adjacent to wetlands creates a risk of the release of highly alkaline leachate. Therefore, he recommends that precast bulkheads are used.
58. In relation to sedimentation of the wetland complex, the application recognises this as a risk mainly during earthworks in the construction stage of the project. The effect is proposed to be managed using a Sediment and Erosion Control Plan, as part of the Construction Environmental Management Plan. However, even with these controls in place, the application concludes that effects from sedimentation during construction will be Moderate in magnitude.
59. Dr Kavazos considers that sedimentation effects on wetlands will also arise during operation, from use of tracks. He notes that this could be managed by finishing bare earth trails with coarse rock and implementing a sediment and erosion control management plan during operation, but does not consider that it would be possible to avoid sediment inputs into the environment; in his view, the tracks would act as a permanent source of sediment as either dust or in surface run-off. Sediment deposition could smother low growing cushion and turf vegetation, alter the substrate and introduce nutrients.

Effects on tributaries

60. Effects on tributaries in the Doolans Basin would be caused by: crossings of tributaries causing permanent modification of stream habitat including the loss of c. 40 m of stream habitat for culverting; the creation of the reservoir inflow diversion, resulting in the loss of c. 55 m of intermittent stream length; sedimentation during construction; stormwater contaminants; and multiple biosecurity vectors that bring a risk of the introduction of didymo to uninfected sites (didymo is currently present at the Doolans Creek weir site but not at upstream sites in the Doolans Basin, and not in the Rastus Burn). Dr Kavazos's view is that the loss of habitat for culverting and the loss of intermittent stream length for creation of the reservoir inflow diversion should be treated as a permanent loss of river extent (this has implications for the RMA planning framework, which will be discussed in DOC's section 53 comments).
61. To mitigate effects from crossings, the applicant proposes to design them in a way that will maintain stream and wetland hydrological function and connectivity; it is proposed that designs and methodologies are provided later and reviewed by a hydrologist and ecologist before works, following by inspection after completion and a final check after 12 months. Dr Kavazos recommends that, to reduce adverse effects on tributaries, certain proposed

culverts – including proposed culvert H – should be replaced with bridges. In addition, he considers that ongoing monitoring of crossings will be required, particularly through wetlands, to monitor and respond to adverse effects.

62. To better mitigate effects on Doolans Creek tributaries from stormwater contaminants, Dr Kavazos recommends: confirmation of final roofing, flashing, guttering and fixing materials before construction of the Gondola Base building complex; maintenance of roofing materials over the life of the consent; installation of first flush diversion or treatment at commissioning; monitoring for the life of the consent; periodic assessment of roof condition with a defined replacement or treatment trigger (with thresholds appropriate to the current state – these thresholds should be at "detection limit" concentrations rather than the ANZG default guidelines); and monitoring of metals deposited in fine sediment.
63. Dr Kavazos also recommends the following, broader, measures to mitigate effects on tributaries and other water bodies:
- measurable hydrological performance outcomes that maintain existing surface and shallow subsurface flow along with long-term performance monitoring established from pre-construction baseline states
 - water quality discharge criteria in the erosion and sediment control plan that reflects the very high ecological value and sensitivity of receiving environments to sediment inputs, with supervision during all in water works.
64. The applicant proposes biosecurity measures to mitigate the risk of introduction of Didymo to the Rastus Burn and to upstream sites in the Doolans Basin. Dr Kavazos supports these measures, including the Check-Clean-Dry protocols that the applicant has agreed to include in the environmental management plan for construction and ongoing operational use, and considers that they should be secured via resource consent condition rather than left to a management plan.

Doolans Creek water-take, weir and bed disturbance

65. The water-take from Doolans Creek Right Branch, and the associated construction of a Tyrolean weir to take water from the creek, involving in-stream bed disturbance, both have the potential to adversely affect freshwater values.
66. Dr Kavazos notes that the reach of river affected by the water-take, for the purposes of assessing instream habitat effects, is the c.600 m immediately below the intake, which is naturally fishless due to downstream barriers and altitudinal limitations. He considers that the residual flow proposed in the application (33.5 L/s) is adequate to manage instream habitat effects in the affected reach and recommends that it be secured as a consent

condition. He agrees with the applicant's assessment that maintenance of this residual flow will ensure that the magnitude of effects is reduced to Low.

67. Installation of the Tyrolean weir will permanently remove c. 20 m² of streambed through placement of the concrete and steel structure, and there will be additional temporary disturbance of the streambed during construction.
68. The application argues that the ecological effects from this activity can be reduced to Low magnitude with appropriate mitigation, and Dr Kavazos agrees that this is achievable, but recommends additional management measures to achieve this, as follows:
 - no concrete or cement washings entering the creek
 - suitable erosion and sediment control and dewatering measures, with construction limited to naturally low flow periods, with supervision by a suitably qualified ecologist during in-water works, and
 - backflushing timed to coincide with elevated flows so far as practicable and avoided during the abstraction period other than at season start-up.

Grooming and snowmaking

69. Dr Kavazos considers that there will be ongoing operational effects on receiving wetlands, tributaries and tarns in the Doolans Basin from grooming and snowmaking, which are not discussed in the application. Grooming and snowmaking are a feature of the operational activity being proposed and would recur every season for the life of the consent.
70. Snow grooming reduces soil temperature, limits root growth, increases soil compaction, reduces infiltration and raises erosion susceptibility, causing shifts in vegetation communities. Sensitive wetland areas, such as the string mire, would be particularly vulnerable to these effects.
71. Snowmaking will introduce water taken from Doolans Creek into tributaries and wetlands in the upper basin that are presently fed only by rainfall, snowmelt and shallow groundwater. This water will be chemically different, with greater alkalinity and higher concentrations of calcium. This could result in the receiving environment, including sensitive cushion bogs and string mire, being altered from its natural state in response to long term chemical changes.
72. To mitigate adverse effect from snow grooming and snowmaking, Dr Kavazos recommends that:
 - An Operational Environmental Management Plan covering grooming, snowmaking, machinery exclusion zones, reservoir operation and maintenance, and vehicle movement, should be certified before operation begins.

- There should be exclusion zones (i.e. mapped no-groom areas) for all mapped cushion bog, string mire and seepages.
- Snow making additives such as Snowmax should not be used.
- Baseline and ongoing monitoring should be undertaken of water chemistry (conductivity, pH, nutrient status) and of vegetation composition in permanently marked plots within cushion bog, string mire and seepage within and outside the snowmaking and grooming footprint, established before operation and continuing at a defined frequency across the resource consent term.
- The management plan should include a defined management response where monitoring exceeds defined thresholds in water chemistry, compositional change, soil compaction or altered melt timing.

Rastus Burn wastewater discharge

73. The proposal would result in an increase of c. 60% in the amount of wastewater discharged into the Rastus Burn, which risks increasing nitrogen and phosphorus loads in the burn.
74. Dr Kavazos considers that the ecological effects from this discharge to Rastus Burn can be managed to reduce the magnitude of effect to Low, provided that conditions set annual nitrogen and phosphorus load limits for the discharge at or below the loads associated with good–excellent macroinvertebrate condition (i.e. lower than the limits currently proposed in the application).

Summary of effects on freshwater values

75. Dr Kavazos’s evidence includes the following table summarising his assessment of the freshwater ecological values that would be affected by the proposal, and the anticipated level of effect following mitigation:

Feature	My assessment of ecological value	My assessment of the level of effect
Doolans Creek (weir and take reach)	High	Low for the water take in isolation, conditional on the residual flow and its telemetered verification; Low to Moderate for weir construction and in-stream bed disturbance
Tributaries	Very High	High (crossings, the reservoir inflow diversion, construction sediment, stormwater contaminants and biosecurity vectors, taken together)
Wetland complex	Very High	Very High (direct loss, fragmentation, hydrological disconnection and sedimentation from the track and services corridor)

Feature	My assessment of ecological value	My assessment of the level of effect
Tarns	Very High	Very High for the total, permanent and irreversible loss of Tarn 3, for which the applicant identifies no avoidance, mitigation, remediation or offset
Rastus Burn	Moderate	Moderate for the wastewater discharge under the proposed load limits of 750 kg N/year and 100 kg P/year; Low if annual nitrogen and phosphorus load limits are set at or below the loads associated with good–excellent macroinvertebrate conditions
Ongoing operational effects (grooming and snowmaking)	Receiving wetlands, tributaries and tarns Very High	Not assessed in the application. Magnitude cannot be assigned with confidence on the current material, but cannot be assumed to be Low
Cumulative effects	—	No document assesses the Project’s freshwater, tarn and wetland effects in combination

76. Dr Kavazos considers that effects from the water take and weir construction at Doolans Creek, and from the Rastus Burn wastewater discharge can be managed to a Low level of effect, provided that appropriate mitigation measures are applied, as described above.
77. However, in Dr Kavazos’s view, as the application stands, three types of effect would remain significant despite proposed mitigation:
- The total, permanent and irreversible loss of Tarn 3 (a Very High level of effect).
 - The loss, fragmentation, hydrological disconnection and sedimentation of the wetland complex, including the seepage, cushion bog and string mire wetlands (a Very High level of effect).
 - The combined effects on the tributaries, including the permanent loss of approximately 95 m of natural stream, stormwater metals and new didymo transfer pathways (a High level of effect).
78. Dr Kavazos considers that potential alternatives to the use of the Tarn 3 site for a reservoir for water for snowmaking have not been adequately explored. If snowmaking were serviced from an alternative water source (e.g. Lake Alta), this would avoid not only the loss of Tarn 3, but also the impacts from the works required to create the access track and pumping infrastructure. These works would impact both freshwater and other ecological values. DOC notes that the views of Kā Rūnaka will be important in understanding the appropriateness of alternative options.
79. Dr Kavazos notes that the application does not assess the ongoing operational effects of grooming and snowmaking on the peat wetlands, the cumulative effects of all aspects of the Project on the freshwater values of the basin, or the implications of climate change for flows in Doolans Creek. In his view, none of these effects can be assumed to be Low.

80. The applicant proposes a \$20,000 contribution to boardwalk construction at Lake Alta, as compensation for the permanent loss of Tarn 3 and the affected peat wetlands. No other compensation has been offered to address the loss of and adverse effects on other freshwater and wetland values that will result from the Project. In Dr Kavazos's view, the proposed compensation is inadequate.

81. Overall, Dr Kavazos comments as follows:

Overall, it is my opinion that the Project as proposed will result in significant residual adverse effects on freshwater features of Very High ecological value, and that those effects cannot be adequately addressed through the mitigation and compensation proposed. Until avoidance of the loss of Tarn 3 has been properly assessed, and the operational, cumulative and climate change effects have been assessed, I do not consider that the freshwater effects of the Project have been adequately assessed or managed

Vegetation and ecosystems (Dr Susan Walker)

82. The proposed activity would affect vegetation and ecosystem values in both the Doolans Basin and the Rastus Burn, with most effects occurring in the Doolans Basin. Dr Walker considers that the ecological significance of the Doolans Basin is "exceptionally high". The whole area is highly distinctive with a combination of characteristics unreplicated in the broader Ecological District (ED).

83. The key attributes not described in the application include the vegetation and ecosystem values related to representativeness, diversity, rarity and distinctiveness, and the broader ecological district. Effects and proposed or potential mitigations are summarised below.

Effects on terrestrial naturally uncommon ecosystems (NUEs)

84. Dr Walker notes that the extent of loss of terrestrial NUEs is not documented; the NUEs themselves are neither identified nor mapped, and areas of direct disturbance are estimated for vegetation communities only, which do not correspond to NUEs (the application estimates a permanent loss of 13.8ha of indigenous vegetation).

85. In Dr Walker's view, the magnitude of effect from loss of these NUEs is likely to be very high, particularly in the Doolans Basin, where it appears that most of the direct disturbance footprint would result in loss of NUEs. Effects would include:

- In the Doolans Basin:
 - Loss of the extreme alpine displacement surface on Helicopter Ridge (scree of acidic rock) for the establishment of the Doolans mid station and its platform

- Loss and fragmentation of the late-glacial moraine landform for the establishment of the Doolans ski trail
 - Loss and fragmentation of the moraine bench for the establishment of the Doolans ski trail, Doolans base area and Learners Slope
 - Complete clearance of the wind deflation surface on the margin of the moraine bench for the construction of the Doolans base area
 - In the Rastus Burn catchment:
 - Loss and modification of screes of acidic rock for the temporary construction access above the Sugarbowl ski area north of Helicopter Ridge, and for the permanent access and service route between Helicopter Ridge and Curvey Basin.
86. Because the application does not document loss of terrestrial NUES, no effects management for this is proposed. The application proposes the following measures to mitigate impacts on plant species, but these measures do not address loss of NUES:
- translocation of all At Risk – Declining and Threatened plant species into suitable and comparable nearby habitat or remediated substrates, and
 - the revegetation of all exposed areas using removed vegetation within the trail footprint.
87. Dr Walker suggests the following measure to reduce adverse effects on NUES which are ecologically sensitive areas and high value vegetation:
- that NUES are identified and mapped, and that those identified areas are avoided.
88. DOC acknowledges Dr Walker's proposed approach, DOC's position is that the NUES should be identified and mapped and then consideration put into whether the impacts on the NUES can be avoided. Additionally, if the impacts cannot be avoided then an appropriate effects management strategy should be considered.

Operational effects

89. Dr Walker considers that many of the potentially material operational effects of the proposal, including effects from snowmaking, grooming, skiing, summer visitors and road use, are not described or assessed in the application.
90. Snowmaking can cause ecological degradation through soils compaction and saturation, greater snowmelt and runoff, erosion and sedimentation, delayed snowmelt and the nutrient enrichment of receiving environments. Dr Walker observes that:

In terrestrial ecosystems, the combination of heavy, nutrient-rich, lower-pH runoff and prolonged soil wetness and snow cover can lead to many biological shifts above and

below ground, including reduced decomposition of organic matter; root suffocation and rot, and vegetation and soil fauna die back, and loss of invertebrate habitat.

91. In assessing potential effects from snowmaking, Dr Walker has assumed that biological and inorganic ice nucleation additives will not be used, but if they are, there would be further negative ecological effects.
92. The following mitigation measures are suggested to reduce adverse effects from snowmaking:
 - Use an alternative high elevation source for snowmaking water with similar ion and pH levels to snow (if available)
 - Mechanisms to collect runoff and filter nutrients from artificial snow and prevent discharge onto and into native vegetation
 - Establish permanent 'no-snowmaking zones' over moraines and wetlands
 - Zero-additive policy banning chemical and biological (including purported 'natural') additives
 - Climate shut-offs to prevent wind drift of artificial snow onto off-piste flora
 - Advanced water treatment to remove nutrients at intakes and reservoirs
 - Mechanical dispersal of remaining artificial snow blocks coinciding with natural melt season's end.
93. Dr Walker notes that the grooming of natural snow causes a loss of insulation, and hence deeper penetration of frost into soils. This causes a wide range of adverse ecological effects, including as follows:
 - Alpine plants and the soil microbes can be subjected to freezing conditions over 0.5 m underground, rather than just at the very surface, and there is increased net ammonification and net N mineralisation over winter
 - The denser groomed snow also melts 2 to 4 weeks later than normal, releasing a late surge of water and mineralised nutrient leaching into receiving wetlands and streams.
 - Spring meltwater gets trapped in a layer above frozen sub-surface layers, causing surface soil over-wetting, surface runoff and exacerbated erosion.
94. The equipment used for snow grooming can also result in direct damage to vegetation.
95. The following mitigation measures are suggested to reduce adverse effects from snow grooming:
 - Limit grooming to the main (engineered) trail.
 - Permanent 'no-groom zones' over moraines and wetlands

96. Skiing and snowboarding causes similar effects to grooming, though with a different spatial distribution – these effects will be concentrated in areas of high traffic, or ‘pinch points’.
97. Skiers and snowboarders also introduce ecologically damaging pollution from ski waxes, the particles and fibres that abrade off synthetic bases of skis and snowboards, and synthetic microfibres shed from clothing.
98. Mitigation measures are suggested to reduce adverse effects from skiing and snowboarding, including:
- Enforce pre-season ski closures until snowpack is deep enough to prevent edges hitting soil
 - Rope off known pinch points during low-snow conditions.
 - Resort-wide ban on fluorinated waxes at entry.
99. Dr Walker considers that a resort-wide ban on fluorinated waxes would be appropriate mitigation. However, as a first step DOC supports further consideration of this issue to inform a range of measures that could minimise the impacts of such chemicals on the environment.
100. Dr Walker also notes that changing temperatures and precipitation as a result of climate change is predicted to decrease natural snow cover and reduce snow seasons in NZ mountains. Groomed and artificial snow on ski slopes will create an environment in which ecosystems are “effectively blocked” from adapting to match the shift in the climate. When climate change increases temperatures to the point that ski-fields are not viable, “the remaining ecosystems will be unequipped to survive the sudden stresses of a warmer, drier alpine environment”. This effect will not be able to be remedied.
101. Dr Walker notes that there is very little summer foot traffic and no mountain biking in the Doolans Basin. The proposed new infrastructure would allow a sustained volume of day walkers, trampers, sightseers and mountain-bikers into the basin. Potential adverse effects from this increased summer use would include the creation of new informal trails and tracks by walkers and cyclists, causing:
- Locally severe effects on alpine soils and vegetation
 - Compacted pathways would act as drainage channels, causing erosion and sedimentation of downstream water bodies
 - Potential biosecurity incursions
 - Pollution, via additions of chemical and material contaminants to the catchment, littering and human waste

- Increased risk of wildfires.
102. The following mitigation measures are suggested by Dr Walker to reduce adverse effects from summer visitors:
- Limit summer visitors to current levels through (a) summer gondola shut down and (b) wheeled vehicle access prohibition or limits
 - Fire closures that automatically shut down access during extreme drought and high wind days.
103. In relation to Dr Walker's advice on limiting summer visitors, DOC considers that there are a range of effects management responses which could be further explored. As a first step, further monitoring post development would support a better understanding of the effects. This would help identify a range of possible effects management and could potentially be supported by conditions.
104. Finally, the use of an unmetalled road by summer vehicle traffic introduces an additional source of pollution to the ecosystem, including:
- Dust plumes in dry summer conditions
 - Heavy metal residues and micro-rubber fragments from vehicles' brakes, tyres and mechanical wear.
105. The following mitigation measure is suggested to reduce adverse effects from summer road use:
- Wheeled vehicle restrictions, summer staff and maintenance transport by aerial lifts or lightweight electric UTVs.
106. DOC notes Dr Walker's position and considers that efforts should be taken to ensure all summer maintenance is as low impact as possible and again, there are potentially a range of effects management responses that could inform this.

Ecological edge effects from earthworks

107. Dr Walker considers that the application underestimates likely edge effects beside proposed earthworks. Based on the relevant literature, and in her experience, edge effects extend at least tens of metres from artificial edges, and sometime over hundreds of metres – not the two metres anticipated in the application. These effects include:
- Sedimentation, extending the distance of drainage pathways away from the main trail
 - Soil compaction and reduced carbon fixation, extending the distance of artificial snow spillover from the main trail

- If snowmaking water is taken from the enriched, higher-pH Doolans Creek, nutrient enrichment, pH change and potentially biological invasions from artificial snow runoff, extending the distance of drainage pathways away from the main trail
- Accelerated erosion from the later and greater melt of artificial snow, extending the distance of drainage pathways away from the main trail
- Effects of pollutants from winter trail use by machines and skiers, extending as far as meltwater off the trail
- Altered snow persistence zones leading to soil biota and plant compositional and phenological changes
- Effects of summer dust, extending hundreds of metres from the main trail and roads.

108. The measures proposed to address operational effects, set out above, would also limit some edge effects.

109. In addition, Dr Walker suggests the following measures

- for sediment, a trigger-level framework tied to the natural background variation, backed by a continuous monitoring regime
- for drainage, at all track crossings, prior baseline validation of flows, continuous upstream and downstream monitoring, pre-emptive trigger levels, and enforceable structural interventions to ensure and confirm that subsurface hydrology remains unaltered.

Weed effects

110. Dr Walker agrees with the applicant's assessment that the likely magnitude of effects from weeds on Doolans Basin vegetation, prior to mitigation, is Very High, noting that research suggests that receiving alpine ecosystems are more susceptible to invasion by the few weeds capable of invading. However, she does not agree that proposed weed management will reduce the level of effect to Low.

111. Dr Walker considers that the expectations of no new exotic species introductions, and control of all existing exotic species, are unlikely to be achieved. She notes that this has not been achieved in the Rastus Burn Basin.

112. The following general mitigation measures are suggested to reduce adverse effects from weed invasions and biosecurity risks:

- Zero-introduction boundary controls (including wash stations) for construction machinery, summer utility vehicles (UTVs), and commercial equipment

- Vehicle fleet separation between Doolans Basin and Rastus Burn
- Staff footwear separation between Doolans Basin and Rastus Burn
- Mandatory high-pressure boot and bike wash station between Doolans Basin and Rastus Burn for staff and visitors, with collection and offsite disposal of runoff
- Advanced water filtration for didymo and other organisms at intakes and reservoirs.

113. To mitigate the effects of small-seeded terrestrial and wetland weed incursion, Dr Walker suggests there needs to be:

- a single-point-of-entry quarantine station separating the Rastus Burn and Doolans catchments
- two-stage mechanical decontamination (the 2013 "Keep It Clean" guidelines are inadequate) with washdown transported offsite, and
- strict footwear and small-tool quarantine
- monitoring using monthly systematic gridded field searches (rather than casual visual inspections) across high-risk corridors for the duration of the consent
- GPS logging, mapping and photography at permanent photo-points of all weed detections to track infestation extent, seedling presence, and treatment efficacy over time
- conditions specifying zero-tolerance for both new invasive species and for spread and remediation, accompanied by cessation of works and traffic movement if an incursion is not contained within a stated timeframe.

114. DOC considers that the biosecurity impacts and mitigations need to be more carefully considered by the applicant to inform appropriate conditions.

Fragmentation

115. In Dr Walker's view, the application has underestimated the likely adverse effects on vegetation and ecosystems from fragmentation – i.e. the dividing up of the Doolans Basin ecosystem and vegetation into smaller fragments, separated by human-transformed communities or cover.

116. Operational effects would exacerbate fragmentation, including via:

- a. Asynchronous isolation: later snow-lie on grooming trails and skier-compacted tracks across Doolans Basin, creating areas where soil remains frozen weeks longer than the surrounding areas. Ungroomed zones that melt out early would be effectively isolated into disconnected fragments.

- b. Physical isolation: corridors of physically altered substrates and plant communities, caused e.g. by walking and biking trails and runoff from snowmaking, separating remaining core patches.

117. The mitigation measures proposed to address the loss of NUEs, and operational effects, set out above, would also limit fragmentation effects.

Combined effects

118. Dr Walker considers that the application does not identify certain adverse ecological effects of the project and it underestimates other effects (both as discussed above), which has led to an “incomplete description and underappreciation of cumulative and irreversible ecological effects that would result from the proposed activities in the Doolans Basin”. These effects could reduce population sizes, and thus the likelihood of persistence, of all plant species occurring in the project site that are listed in the NZ Threat Classification System as Threatened, At-Risk or Data Deficient.

119. Dr Walker considers that the following species are at particular risk from the combined adverse effects of snowmaking, grooming, fragmentation and edge effects:

- *Craspedia uniflora* var. *uniflora* (a Threatened – Nationally Endangered and Regionally Data Deficient plant) which occurs in cushion bogs, riparian wetlands and seepages.
- The recently described *Montia miniscula* (a Threatened – Nationally Critical plant) (Heenan 2026), which occurs in palustrine fen, or ‘seepage’, wetlands and string mire wetlands, and is known from only two sites (both in Otago, one of them the Rastus Burn). Dr Walker considers that *M. miniscula* may be present in the Doolans Basin wetlands, but notes that it was not expressly searched for in the applicant’s ecological surveys.

Overview of proposed management of effects on vegetation and ecosystem values

120. In Dr Walker’s view, appropriate management (i.e. sequential avoidance, minimisation, and remediation, offsetting and compensation, as required under the NPS for Indigenous Biodiversity) has not been demonstrated for:

- damage to and loss of distinctive and high-value NUEs that were not identified;
- unidentified effects of operational activities (snow making, snow grooming, and skiing), including further snowmaking that can reasonably be anticipated in future;
- reasonably foreseeable impacts of summer visitor and road use; and
- the extent of edge effects, fragmentation, and weed ingress that can be reasonably expected.

121. This is because, in Dr Walker's view, neither the ecological values nor the effects have been adequately identified in the application.
122. Dr Walker has suggested some potential avoidance and mitigation measures relating to effects of snowmaking, snow grooming, skiing, summer visitor, summer roading and incursions of invasive plants, as set out above, which could also limit edge effects and fragmentation. However, in her view, residual effects would likely remain very high even after all possible measures were taken.

Invertebrates (Dr Corinne Watts)

123. The proposal will affect invertebrates in both the Rastus Burn and the Doolans Basins, with effects concentrated in the Doolans. Dr Watts comments that:

The Remarkables Ecological District (ED) supports a diverse and distinctive alpine invertebrate fauna, although it remains incompletely documented. ... Overall, evidence indicates high alpine invertebrate diversity, specialised habitat associations, and a significant component of rare, poorly known, and potentially undescribed fauna. The fauna is particularly associated with specialised alpine habitats such as cushionfields, snowbanks, fellfield, wetlands, and alpine soils.

The Doolans Basin warrants specific consideration because, unlike the already modified Rastus Burn ski-field environment, it is described in the application as "almost entirely unmodified and natural." This provides a more intact invertebrate baseline, with comparatively continuous alpine habitats and specialised microhabitats that support potentially diverse and poorly known fauna. The effects of the proposed expansion should therefore be distinguished from those occurring within the existing ski-field footprint, particularly given the acknowledged limitations of the invertebrate survey and the potential for direct habitat loss, fragmentation, microclimate change and loss of refugia in Doolans. The comparatively intact condition of Doolans is a crucial factor when assessing the magnitude and significance of these effects.

124. Effects on invertebrates, and proposed or potential mitigations, are as follows.

Habitat loss

125. In Dr Watts' view, habitat loss will result in a 'Moderate to High' level of effect on invertebrates, with the level of effect varying for different species. She comments:

The magnitude of the effect will depend on the extent, nature and quality of habitat affected, as well as the ecological requirements, distribution, abundance, and mobility of the taxa concerned...The loss or modification of habitats supporting restricted-range or habitat-specialist taxa has the potential to result in disproportionately greater effects than the loss of more widespread or less specialised habitat.

126. The mitigation measures discussed above in relation to vegetation removal, i.e. translocation of At Risk – Declining and Threatened plant species and revegetation of all exposed areas using removed vegetation, are also relevant to habitat loss for invertebrates.
127. In addition, the applicant proposes translocation of invertebrates from the disturbance footprint to comparable nearby habitats.

Construction and operational effects

128. Ski-field construction and operation have the potential to affect invertebrates both via direct mortality or disturbance and via modification of soil, litter, vegetation and aquatic habitats. Dr Watts notes that the application acknowledges adverse effects from construction noise. However, like Dr Walker in relation to vegetation and ecosystems, Dr Watts considers that the application does not adequately identify or assess a number of important effects of the proposed project on the Doolans Basin, including in particular snowmaking and grooming, skiing and increased on-mountain activity, visitor use in summer, and roading and associated infrastructure.
129. Snowmaking can alter the physical and chemical conditions of alpine soils and associated invertebrate habitat in the following ways:
- Artificial snow is denser than natural snow and, in combination with grooming and skiing, can increase snow compaction. This can alter soil porosity, permeability, moisture and temperature, potentially reducing the suitability of soil and litter habitat for invertebrates and affecting associated microbial and decomposition processes
 - Artificial snow can persist beyond natural snow cover and delay snowmelt and soil warming. This can shorten or shift the period suitable for activity, feeding and reproduction of some alpine invertebrates and to alter the seasonal availability of food resources.
 - Snowmaking introduces additional water and dissolved ions to the receiving environment. Where source water differs chemically from natural precipitation, repeated application has the potential to alter soil conditions and vegetation, which can affect invertebrate habitat and food resources. These effects may extend beyond the snowmaking area, through drainage and runoff.
 - Increased or delayed meltwater, particularly where soils are compacted, may increase surface runoff, waterlogging and localised erosion. This can remove or redistribute litter, organic soil and associated invertebrate habitat and transport sediment into downslope wetlands and waterways.

- Direct disturbance or mortality may also occur where snowmaking affects occupied surface or soil habitat.

130. Like Dr Walker, Dr Watts notes the potential interactions of snowmaking with climate change. She notes that the changing temperatures and changes to the time and duration of snow cover may result in greater reliance on artificial snow in the future, to maintain the ski field. This could exacerbate the adverse impacts set out above. Dr Watts comments that “the absence of an assessment of how snowmaking requirements may change under foreseeable future climate conditions limits confidence in the assessment of the project's long-term effects on terrestrial invertebrate values.”

131. Snow grooming can produce some effects similar to snowmaking, and it also changes the physical properties and insulating capacity of the snowpack in the following ways:

- Increased snow density and altered snow insulation can affect heat transfer between the atmosphere and underlying soil. Where snow cover is relatively shallow, this may increase frost penetration and affect overwintering invertebrates and soil biological processes.
- Repeated grooming can contribute to snow and soil compaction and alter soil porosity and permeability. During snowmelt this may increase soil saturation and reduce the suitability of soil and litter habitat for some invertebrates.
- Dense groomed snow can persist beyond natural snow cover, delaying soil warming and the onset of biological activity. This may alter the timing and duration of activity and resource availability for some alpine invertebrates.
- Concentrated or delayed meltwater from groomed areas may increase localised runoff and erosion, potentially resulting in loss or redistribution of surface organic matter and associated invertebrate habitat.

132. Skiing can compound the physical effects of snow compaction and grooming, as follows:

- Skiing may directly disturb or kill surface-active invertebrates and affect shallow soil and litter habitat, particularly where snow cover is thin or discontinuous.
- Ski traffic can increase snow compaction and, where snow is shallow, contribute to disturbance of underlying vegetation, litter and soil. This may reduce habitat quality for surface- and soil-fauna.
- Skiing and associated recreational activity may introduce litter and other contaminants to the alpine environment, which can have localised effects on invertebrates and their food resources (with magnitude of effects depending on the nature and quantity of contaminants).

133. Summer visitor activity has the potential to affect invertebrates primarily through physical disturbance and degradation of their habitat, as follows:

- Off-track walking and other recreational activity can directly disturb or kill surface-active invertebrates and damage vegetation, litter and shallow soil habitat.
- Repeated foot traffic can compact surface soils and create informal tracks, reducing soil porosity and increasing runoff and erosion, and leading to loss of litter and organic soil habitat for invertebrates.
- Repeated disturbance can reduce the continuity and quality of suitable habitat, potentially affecting less mobile or habitat-specialist taxa.

134. Road construction and vehicle use can affect invertebrates through direct habitat loss, physical disturbance and changes to adjacent soil and vegetation.

135. Dust from roads, deposited on adjacent vegetation, litter and soil, can cause habitat degradation.

136. Road construction and vehicle use can compact road margins and alter natural drainage patterns, causing sedimentation that may reduce habitat quality for terrestrial, aquatic and semi-aquatic invertebrates.

137. Vehicle movements may cause direct mortality of ground-active invertebrates crossing roads or tracks, and vehicle-associated contaminants provide an additional potential source of localised effects.

Overview of proposed management of effects on invertebrates

138. Dr Watts considers that the proposed Terrestrial Ecology Management Plan (TEMP) does not provide a specific enough management framework “to provide confidence that effects on conservation-significant and poorly known invertebrate taxa will be adequately avoided or detected”.

139. More species-specific information is required on Threatened, At Risk, Data Deficient and otherwise poorly known taxa (identified in Appendix 2 of the TEMP), including their known distributions, habitat requirements and potential project effects.

140. Dr Watts considers that avoidance of important habitat should be prioritised. More evidence is required to demonstrate that proposed salvage and reinstatement of microhabitats will succeed; the TEMP “does not adequately demonstrate that relocated or reinstated cushionfield, turf, moss, rock refugia and associated soil/litter complexes will retain their ecological function for invertebrates”. Insufficient detail is provided on proposed monitoring, and it is therefore unclear whether it would reliably detect Project-related effects on invertebrates.

141. A range of potential improvements to proposed mitigation measures are recommended, including:

- Consideration of vegetation direct transfer methods for invertebrate communities (or notable TAR species)
- Transfer of topsoil, litter, schist debris or intact habitat blocks, which may improve salvage of eggs, larvae, pupae and less mobile species that are unlikely to be detected using conventional salvage methods.
- Greater justification for relocation site selection, including how recipient sites will maintain long-term habitat quality, host plants and ecological processes beyond simple habitat similarity.

142. In terms of mitigation of habitat loss, Dr Watts considers that “the information provided does not give a sufficiently robust basis to determine whether the proposed effects-management response is commensurate with the values at risk”. In her view, the application has not sufficiently demonstrated avoidance of areas supporting significant or potentially irreplaceable invertebrate values, and the extent to which effects can genuinely be minimised or remedied is uncertain. Avoidance of significant invertebrate habitat or populations should be the primary response where affected values are vulnerable, irreplaceable or cannot be reliably recreated.

143. It is noted that no offsetting or compensation is proposed by the applicant to address residual effects on invertebrates.

144. Dr Watts concludes:

On the information available, I therefore consider that the adverse effects on invertebrates remain insufficiently addressed, and there is presently no adequate basis for concluding that the proposed effects-management measures will address the residual effects. The evidence of Dr Maseyk and Dr Walker is relevant to these matters, particularly in relation to the significance and vulnerability of the terrestrial ecological values, the limits of restoration and the circumstances in which offsetting or compensation can appropriately address residual effects.

Avifauna (Dr Kerry Weston)

145. Six indigenous bird species are known to be present in the alpine grassland habitats of the Remarkables Ecological District, as follows:

- New Zealand pipit/pihoihoi (At Risk – Declining)
- eastern falcon/karearea (Threatened – Nationally Vulnerable)
- kea (Threatened – Nationally Endangered)

- paradise shelduck/Pūtangitangi (Not Threatened)
- Australasian harrier/kāhu (Not Threatened)
- southern black backed gull/karoro (Not Threatened)

146. All six bird species except kea were recorded during the applicant's field surveys. Dr Weston advises that the three threatened or at-risk (TAR) species – NZ pipit, eastern falcon and kea – are of high to very high ecological value.

147. The application states that kea are “rare visitors” but Dr Weston “would caution against this description, given that several sightings of small flocks of kea have been recently recorded (during Autumn - Spring 2026) within the Project area”. They are not known to nest in the area, but Dr Weston describes them as currently being “intermittent visitors”. Also, recent increased conservation effort for the species, together with the proposed increase in human activity in the area via the proposal, may contribute to increased numbers of kea in the area as time goes on.

148. The pipit is the most abundant species recorded in the project area. Dr Weston notes that, during the most recent classification for New Zealand, the NZ Threat Classification System panel commented that, due to a lack of data, both the pipit and the eastern falcon “may be undergoing greater declines than currently estimated”. Two or three pairs of eastern falcon hold territorial ranges across the Upper and Lower Rastus Burn, and the headwaters of the Doolans Creek Right Branch.

Effects

149. Dr Weston agrees with the applicant's assessment that effects on these species from the proposal would be as follows:

- Moderate to high levels of direct ongoing effects on eastern falcon and NZ pipit through loss of high-quality foraging and nesting habitat, and infrastructure impediment.
- Indirect effects from construction noise and ongoing light, operational noise and increased human presence, which will be highest for kea – and will reach high to very high levels for that species given that they are inquisitive and attracted to human activity.

Mitigation measures

150. Dr Weston is satisfied with the measures proposed in the application to mitigate effects on eastern falcon. These include:

- surveying nesting habitat within the Project area during the falcon breeding season no more than 5 days prior to the start of works, and establishing a ≥ 200 m

exclusion zone around any nests found until the chicks fledge; in Dr Westons' view, this provides the best chance of breeding success and reduces the potential effects of disturbance on this species, and

- measures to mitigate the effects of infrastructure impediment and window strike within the falcon's territories.

151. Dr Weston notes that pipit "will be the most affected avian species due to a relatively large loss of foraging and breeding habitat" but is satisfied that measures proposed to mitigate effects on this species are adequate, given its higher tolerance to human disturbance. These measures include undertaking nest surveys no earlier than five days prior to breeding habitat disturbance. If no active nests are found, vegetation within 50 m of these areas will then be cleared to discourage the pipits from nesting within the disturbance footprint. If a nest is located, the Applicant will attempt to avoid or delay earthworks in the area. Dr Weston agrees that, if a nest containing eggs is established within the area to be disturbed, "removing and humanely destroying the eggs is the best effect-mitigating measure to provide the breeding pair with the best chance of surviving and renesting".

152. Dr Weston supports that if a nest is found that contains chicks, all attempts should be made to avoid the area and allow the nest to continue fledging – noting that chicks will remain in the nest for approximately two weeks after hatching. This approach would recognise "the substantial investment the breeding pair have put into the nest at this point and it may be too late for them to renest that season".

153. It is noted that, as part of the fast-track approval, the applicant is applying for a wildlife authority to "capture and, as a last resort, destroy nests (eggs) (to force re-nesting within the same breeding season) of New Zealand Pipit" within the Project's vegetation clearance and earthworks disturbance footprint.

154. In relation to kea, Dr Weston comments that the effects of increased human activity will not be easy to mitigate. She commends the applicant's proposals to use lead-free building materials and keep ongoing waste and materials secured away from kea, but recommends that the applicant also commits to ongoing advocacy and education for staff and customers on not feeding kea, and on how to keep kea safe around ski field operations.

Lizards (Nicholas Harker)

155. McCann's skink (Not Threatened) was the only lizard species found during the applicant's survey. According to this survey, the area of lizard habitat that intersects with the project footprint is approximately 3.46 ha, and the number of McCann's skinks impacted within this footprint is estimated to be approximately 300 - 600 individuals. Mr Harker considers

that the applicant's assessment has adequately captured the species present on the site but may have underestimated the number and density of McCann's skink present.

156. Mr Harker notes several other lizard species that are known to be present in alpine areas in the wider landscape but considers the only species other than McCann's skink that is "moderately likely" to be present is the Central-southern cryptic skink (At risk - declining). He notes that, based on the applicant's surveys, if any other species are present then this will likely only be in low numbers.

McCann's skink – effects and mitigation

157. Looking at impacts on McCann's skink, Mr Harker considers that the construction stage of the proposal will likely result in the injury and death of hundreds, and possibly the low thousands, of this species. There are large numbers present in nearby areas within the Remarkables ecological district, and large and secure populations elsewhere in the South Island, so the proposal is "unlikely to threaten the persistence of McCann's skinks locally or nationally". However, the impact within the site will be significant.
158. It is noted that, as part of the fast track approval, the applicant is applying for a wildlife authority to "disturb, injure and/or kill the Not Threatened McCann's skink" within the Project's vegetation clearance and earthworks disturbance footprint.
159. To mitigate effects on McCann's skink, the following measures are proposed:
- Staged habitat reduction within the footprint of the earthworks, in order to gradually remove cover and encourage skinks to disperse naturally
 - Creation of habitat (rock piles and associated planting) in 14 sites within the footprint.
160. No salvage of McCann's skink is proposed.
161. The applicant acknowledges that there will be residual effects following these mitigation measures. Two compensation projects are proposed:
- A research project using eDNA to detect threatened and at-risk lizards in the Remarkable Ecological District and surrounding alpine areas
 - Translocation of Lakes skink (Threatened – Nationally Vulnerable) from four Otago sites to the new Whakatipu Lizard Sanctuary at Kelvin Heights
162. Mr Harker considers that these two projects would adequately compensate for the impact on McCann's skinks, and would result in a net benefit for lizard conservation. However, there is uncertainty over whether the \$80,000 funding proposed by the applicants will be enough to cover both projects.

163. In addition, Dr Maseyk notes that both projects are existing initiatives by other parties, which calls into question whether the proposed compensation will actually result in additional gains for lizards.

Other lizard species – effects and mitigation

164. Effects on other lizard species are uncertain as they are not known to use the site. As set out above, in Mr Harker's view, the only other species moderately likely to be present (in low numbers) is the Central-southern cryptic skink. The applicant proposes to use an incidental discovery protocol to manage potential effects on other species. If any threatened or at-risk lizard species is found, any work encroaching on possible habitat must stop immediately, and DOC and the project herpetologist must be advised as soon as possible. If works are unable to avoid the habitat of the species, then an additional wildlife authority will likely be required.

165. Mr Harker comments on this proposal as follows:

In the event lizards other than McCann's skink are present within the earthworks footprint, I have concerns about the feasibility for incidental discovery protocols to be adequately implemented and provide protection for these species (given the challenges around observing and locating any lizards that are displaced or disturbed during earthworks in an alpine environment).

166. To address these concerns and better manage potential effects, Mr Harker recommends that a herpetologist should be present on site when vegetation is being cleared.

Landscape (Jeremy Head)

167. The project site is identified as having Outstanding Natural Landscape (ONL) values in both the Queenstown Lakes Proposed District Plan (in the case of most of the Rastus Burn Basin) and the Central Otago District Plan (the Doolans Basin and an area on the Rastus Burn side of the ridgeline). The site is fully covered by contiguous ONL overlays across the two district plans.

168. Mr Head's evidence which addresses the landscape effects of the proposed activity, structure or facility indicates that he generally agrees with the applicant's assessment of effects on landscape values.

169. Areas of disagreement between Mr Head and Ms Pfluger relate to geomorphological effects, and development on Helicopter Ridge.

170. Mr Head notes that geomorphological processes (i.e. the physical, chemical, and biological mechanisms that build, wear down, and reshape landforms on the Earth's surface over time) are a core part of the physical landscape. In his view, while Ms

Pfluger's landscape assessment graphically illustrates geomorphology in the landscape, it does not interpret the various features as distinct geomorphic features or explain their formative processes.

171. Mr Head notes that DOC has obtained evidence from Mr David Barrell on the geomorphology of the project area and the associated effects of the proposal. This section of the report will discuss Mr Head's comments on the geomorphological aspect of the proposal's landscape effects (which are informed by Mr Barrell's evidence); the following section will discuss Mr Barrell's evidence directly, in relation to effects on the potential for scientific information to be gleaned from one of the site's geomorphological features, now and in the future.

172. Mr Head comments on the geomorphological features present in the Doolans Basin landscape as follows:

The glacier-derived geomorphology in the Doolans Basin is characterised by its enclosed cirque-like basin landform with steep headwalls extending to the separating ridgeline contrasted with gentler more rounded moraine deposits within the basin. The basin also includes alpine tarns of which 'Tarn 3' has formed between two moraine ridges. Scree slopes and deeply incised alpine drainage systems are also present in the basin. These features together provide a high degree of geomorphic legibility, enabling the formative glacial and ongoing erosional processes of the Remarkables mountain environment to be readily understood. The basin's geomorphological expression is a key contributor to its landscape character and its natural values.

173. Mr Head notes Mr Barrell's evidence that the late-glacial moraine sequence in the Doolans Creek Right Branch Basin is an exceedingly well-preserved landform feature – the best-preserved of its type and age in the wider region. Mr Head considers that the effects on these geomorphological values from the proposal would be as follows:

- Earthworked and non-earthworked groomed trails, and the earthworked Doolans access road / Water take access track traverse the lower five ridges of the late-glacial moraine sequence in places.
- This would result in landform modification that would physically and permanently alter parts of the nationally relevant late-glacial moraine sequence, although the overall form of the moraine sequence will not be fully modified
- From an aesthetic perspective, during summer when the moraine landforms are most visible, the gentle hummocky terrain will include earthworks scarring associated with the formation of trails along with the presence of a ski lift.

174. Overall, Mr Head considers that any earthworks modifications would have a 'Very high' adverse effect on the late-glacial moraine sequence. These adverse effects arise not only from physical disturbance, but also from a reduction in the geomorphological legibility of the glacial sequence and in how the glacial extent, processes and landscape evolution may be interpreted. Mr Head does not consider that these effects could be mitigated or remediated.
175. Mr Head would like to see appropriate mitigation of effects on Helicopter Ridge. He notes that the proposed gondola mid-station building on this ridge will include a retaining wall up to 8.5 m high and 70 m long, and a lower wall 3.5 m high and 180 to 190 m long, both very large structures which could stand out when viewed from a distance, particularly when the mountain is covered with snow. Mr Head advises that use of gabion baskets, or facing the walls with local rock, would help them to blend in with surrounding natural rock in summer, and any rock texture or stepping of the walls would help retain some snow cover in winter. He notes that the applicant's position is that gabion basket walls are their "preferred approach", and that if this is not viable then underlying alternative walling structures "may" be faced with local rock, and that any retaining structures minimise visual effects "where practicable".
176. In Mr Head's view, further design information is required to assess how the retaining walls would be built, to ensure effects are appropriately managed.

Geomorphology (David Barrell)

177. As noted in the landscape evidence summarised above, Mr Barrell's view is that a moraine sequence in Doolans Creek Right Branch Basin is an exceedingly well-preserved landform feature. Based on its altitude and setting, Mr Barrell interprets the sequence to be of late-glacial age, or approximately 12,000 to 16,000 years old.
178. The late-glacial moraine sequence is particularly important for scientists seeking to better understand past climates across geological time, due to its location and age. It provides an opportunity to obtain climatic and chronological data for this part of New Zealand, relating to a globally important period when the Earth transitioned from a glacial to interglacial climatic condition. Few such examples of these landforms are preserved in the Southern Alps.
179. With respect to the late-glacial moraine sequence, Mr Barrell comments:

The Doolans Creek Right Branch Basin moraine sequence can be regarded as an outstanding natural feature of national scientific relevance. Age-dating and mapping of the

sequence, and paleoclimatic interpretation is expected to yield scientific information not available from any other source in the wider region.

Moraine age determination by surface exposure dating of boulders on the moraine ridges is critically dependent on having undisturbed boulders and any human activity or modifications may adversely affect their scientific value.

180. In Mr Barrell's view, the parts of the proposal of relevance to the moraine sequence are:

- the proposed northern 4WD access track and nearby accompanying groomed ski trail, as they appear to involve considerable ground modification and earthworks over the lower 5 ridges of the moraine sequence, and
- the reservoir proposed to replace Tarn 3, which would occupy a large footprint centred on the existing tarn that is ponded between two of the moraine ridges, and would be "likely to considerably disrupt the natural integrity of that part of those moraines".

181. The proposed activity would at least compromise the ability to obtain key scientific information in the late-glacial moraine sequence, because it would involve disturbance of the boulders required for the moraine age determination method referred to above. If all suitable boulders are disturbed or removed, the proposed development will permanently prevent future sampling and the obtaining of relevant scientific information.

182. Two potential mitigation measures are identified by Mr Barrell, as follows:

- Redesign the development to avoid the moraine sequence (noting that that may result in other effects that Mr Barrell is unable to comment on).
- Enable the collection and dating of samples from the moraine sequence before the development proceeds. However, this approach would still preclude or compromise the use of any yet-to-be-developed methods of scientific enquiry that may be applicable to the moraine sequence.

Heritage (Dr Matt Schmidt)

183. The applicant's heritage assessment finds:

- no documentary evidence of archaeological or historic heritage within the Remarkables Ski Area (including the access road and car park)
- no physical evidence of archaeological or historic heritage within the Doolans Basin Expansion Area;

- that, as part of the wider Kawarau/Remarkables Conservation Area, the Doolans expansion area contributes to the setting of adjacent historic heritage and thus has “Low” historic heritage values; and
- that the proposal would have a negligible adverse impact on these heritage values – the only impact would be a slight change to the setting of the heritage values in the wider Conservation Area.

184. To mitigate this impact, the assessment recommends adoption of the following measures:

- consideration of how visual impacts on the wider heritage landscape can be minimised by careful placement and camouflaging of structures;
- consultation with DOC on increased visitation and public interpretation; and
- adherence to accidental discovery protocols, appended to the assessment, in the event of discovery of human remains, Māori or European heritage.

185. Dr Schmidt considers that the applicant’s assessment is generally successful in presenting the human history of the project area and wider landscape but considers that the absence of a comprehensive foot survey of the whole Doolans expansion area by an archaeologist or heritage expert affects the assessment findings.

186. Although a foot survey of the expansion area was undertaken by the applicant’s heritage consultants in March 2025, this did not include the area of the proposed Tyrolean weir and water intake at the Doolans Creek Right Branch, and no subsequent survey of that area was undertaken, despite advice from DOC that this was required. The applicant’s heritage assessment acknowledges that it is not possible to confirm presence or absence of heritage features without a foot survey.

187. Dr Schmidt considers that historic research reported in the heritage assessment indicates that heritage features associated with gold mining may be present around the location of the weir and water intake; these are the parts of the site where heritage values are most likely to be present.

188. In Dr Schmidt’s opinion, it is not best practice to apply an accidental discovery protocol to a project area that has not been subject to a field survey, and where there is reasonable cause to suspect that heritage sites are present. Dr Schmidt recommends avoidance of any identified heritage values in the Doolan’s Expansion Area.

Visitor experience (Tamzin Moore)

189. The existing Remarkables Ski Area is within the Rastus Burn Recreation Reserve, while the Doolans Basin is within the Remarkables Conservation Area. DOC’s Conservation Management Strategy for Otago defines the Doolans Basin as being within a Backcountry

Visitor Management Zone. The existing Remarkables Ski Area is defined as Front Country.

190. In Ms Moore's view, the primary recreation effects of the proposal would be the substantial modification of existing backcountry recreation values, which will change the character of the recreation setting. This would involve a substantial increase in the intensity and managed nature of recreation use compared with the existing back country setting. Ms Moore comments:

Visitors would continue to be able to undertake skiing, ski touring, mountaineering, tramping, hunting and other recreation activities within the wider area. However, the quality and character of those experiences within Doolans Basin would change substantially as a result of the introduction of gondola and other ski-area infrastructure, groomed ski trails, avalanche management infrastructure, increased visitor numbers and encounters, and greater levels of management intervention.

191. Ms Moore agrees with the applicant's assessment that the adverse effects on backcountry winter recreation values would be High or Very High: "The experiential values most affected include solitude, remoteness, natural quiet, an unmodified alpine setting and opportunities for self-reliant recreation". She also agrees that there are limited means to mitigate this effect.
192. Measures proposed by the applicant as mitigation – which include maintenance of public access where safe, continuation of "one-up" lift passes for backcountry users, establishment of a recreation users group, ongoing engagement with recreation interests, and rehabilitation measures associated with eventual closure of infrastructure – are, in Ms Moore's opinion, better viewed as means of maintaining access and managing interactions with recreation users, rather than as mitigation of the principal recreation effect itself.

Natural Hazards

193. The Natural Hazards Assessment that forms part of the application identifies a range of natural hazard risks across this alpine environment. The residual risks from natural hazards range from low to medium, with one high risk identified. This is the proposed access road in the Rastus Burn from the Sugar Bowl to Helicopter Ridge. This traverses above what is locally known as Swan Lake and below a steep rocky ridgeline containing numerous potentially unstable rocks.
194. Both Central Otago District Council and Queenstown Lakes District Council have commissioned peer reviews of the Natural Hazards Assessment and exchanges between the parties - NZSki and Queenstown Lakes District Council in particular - were not

concluded prior to the final application documents being lodged with the EPA on 4 September 2026.

195. DOC has health and safety requirements in the concession documents, including in regard to audited health and safety plans. However, DOC considers it is important for the Panel to have a better level of understanding of the natural hazards at play before the Panel can determine whether or not natural hazards can be avoided, remedied or mitigated sufficiently; and in particular the rockfall hazard at the proposed road and skier return trail above Swan Lake.
196. DOC notes that the Assessment of Environmental Effects states for the proposed access route, that any cutting of the access formation is likely to cause areas of upslope instability and that downslope is sufficiently steep where retaining of the formation is difficult to achieve with a practical or economically viable solution. However, Sheet E402 of the Project Maps and Drawings shows installation of lengths of retaining wall along the lower edge of this road, up to 3.5m high. These statements appear contradictory.

Section 17U(2) - The Minister may decline any application if the Minister considers that-

- *s17U(2)(a) - the information available is insufficient or inadequate to enable him or her to assess the effects (including the effects of any proposed methods to avoid, remedy, or mitigate the adverse effects) of any activity, structure, or facility; or*
 - *s17U(2)(b) there are no adequate methods or no reasonable methods for remedying, avoiding, or mitigating the adverse effects of the activity, structure, or facility.*
197. DOC considers that the following additional information is required to fully understand the actual and potential effects of the proposal:
- Mapping of terrestrial naturally uncommon ecosystems (NUEs), and quantification of the area of each type of NUE that will be lost
 - Demonstration on how avoidance of effects of Tarn 3 has been undertaken, including whether reviews of current consent conditions are required and what the ecological effects of alternative sources of water for snow making are
 - A foot survey of the area of the proposed weir and water intake at Doolans Creek, to search for heritage sites
 - Comprehensive data on invertebrate values in the project area – information is currently limited by the absence of sampling during early to mid-summer, and no reporting of abundance data
 - Assessment of effects on geomorphology

- Assessment of the anticipated trajectory of climate change from a suitably qualified professional, how this will be responded to in regard to the longevity of the ski-field, additional snow making, and where any additional water required for this will be sourced from and stored
- Assessment of operational effects from snow making, snow grooming, skiing, visitor use and road use on freshwater, vegetation and ecosystem, and invertebrate values, taking into account the effects of climate change over the requested term of the concession (40 years)
- Assessment of the combined and cumulative effects of all elements of the project, particularly on freshwater and vegetation/ecosystem values
- Measures to suitably avoid, remedy or mitigate natural hazard risks, and in particular rockfall risk and road stability on the proposed access track and skier return trail above Swan Lake.

198. DOC considers that there are no adequate or reasonable methods for remedying or mitigating the following adverse effects of the activity, although it may be possible to avoid some of them by redesigning the activity:

- Loss of Tarn 3
- Loss of terrestrial naturally uncommon ecosystems (currently unquantified)
- Loss of c. 55 m of intermittent stream length to create the reservoir inflow diversion and loss of c. 40 m of stream habitat for culverting
- Loss of c. 0.295ha of wetland complex, which includes naturally uncommon and endangered ecosystems
- Permanent alteration of a nationally significant moraine sequence (the landscape effect of this could not be mitigated or remedied; as discussed above, the loss to scientific knowledge could be partly mitigated by undertaking dating of boulders on moraine ridges before the development proceeds)
- Substantial modification of existing backcountry recreational values.

Section 17U (4) - The Minister shall not grant any application for a concession to build a structure or facility, or to extend or add to an existing structure or facility, where he or she is satisfied that the activity —

- a. could reasonably be undertaken in another location that—*
- *is outside the conservation area to which the application relates; or*
 - *is in another conservation area or in another part of the conservation area to which the application relates, where the potential adverse effects would be significantly less; or*

b. could reasonably use an existing structure or facility or the existing structure or facility without the addition.

199. Water storage is sought to support the proposed snowmaking in the Doolans. The proposed reservoir is to be a constructed and lined structure where Tarn 3 currently exists, resulting in the loss of the tarn. Construction of a 4WD road (approx 1.5 km) extending from the Doolans Base area down to the Doolans Creek is sought to service the associated water intake infrastructure to fill the proposed new reservoir.

200. DOC considers the information provided by the applicant has not demonstrated that alternative water storage locations have been sufficiently investigated within the relevant conservation areas, where the potential adverse effects may be significantly less.

Section 17U(5) Granting Interests in the Land

201. Section 17(U)(5) applies to applications for leases or licences granting an interest in land and provides that the Minister of Conservation may only grant such a lease or licence if satisfied of certain matters.

202. The granting of the schedule of leases and licences as set out in two concession documents at Appendices A and B is consistent with s17U(5).

Section 17U(6) and (7) Circumstances when no lease may be granted

203. No lease may be granted unless the applicant satisfies the Minister that exclusive possession is necessary for —

- *the protection of public safety; or*
- *the protection of the physical security of the activity concerned; or*
- *the competent operation of the activity concerned.*

204. DOC is satisfied that should the Panel approve the application, that the lease components would satisfy sections 17U(6) and (7).

Section 17W Relationship with Conservation Management Strategies and Plans

205. The Otago Conservation Management Strategy 2016 (CMS) is the relevant conservation management strategy.
206. The Remarkables Base Area Concession is located only in the Rastus Burn Recreation Reserve. The Doolans Concession is located in part in the Rastus Burn Recreation Reserve and in part in the Remarkables Conservation Area.
207. An Appendix to the DOC Covering Report provides a detailed identification and analysis of all of the relevant provision of the CMS. Discussion of key provisions only follows.

The Remarkables Base Concession

208. The CMS identifies and allows for intensive use at the Remarkables ski-field; and that the Remarkables ski-field (and others) in the Western Lakes and Mountains/Ngā Puna Wai Karikari a Rākaihautū Place are highly valued recreation and tourism opportunities.
209. The CMS allows for precautionary further development of existing ski-fields where their natural values are already modified, in preference to the development of new ski-fields. Amongst other things, this is subject to appropriately avoiding, remedying and mitigating adverse effects; and for ridgelines to remain in their natural state. It allows for structures to be present where well blended into the landscape or where buildings already exist; and that amongst other criteria, such authorisations should be consistent with the purpose for which the land is held. The ski-field base area, subject to much proposed re-development, is already modified.
210. DOC considers that adverse effects from activities sought by the Remarkables Base Concession are able to be appropriately avoided and mitigated by the proposed designs, construction methods and DOC's proposed concession conditions to reach outcomes commensurate with the purpose for which the Rastus Burn Recreation Reserve is held.
211. Taken across all the relevant CMS provisions, and subject to the above measures and to Treaty partner interests, granting of the Remarkables Base Concession would be consistent with the CMS.

The Doolans Basin Concession

212. Unlike the adjoining Wye Creek, the CMS does not preclude the Doolans Basin from consideration for development, with decisions about any proposed development to rest with how any such proposal might address matters such as:
- a. the requirement to conserve the geological features, landforms and landscapes of the Remarkables Conservation Area
 - b. the requirement to leave ridgelines in their natural state
 - c. avoidance, remedy and mitigation of adverse effects including across ecology, landscape and recreation
 - d. applying a precautionary approach to the approval of new structures and terrain modification; and
 - e. considering the likely effects of water use (for snow-making) and the likely longevity of the field in the face of climate change.
213. Amongst others, there are a number of key CMS provisions relevant to the activities sought by the Doolans Basin concession. These are:
- Objective 1.5.1.1 - *The diversity of New Zealand's natural heritage is maintained and restored, with priority given to ... (e) conserving significant geological features, landforms and landscapes, including those listed in Appendix 9, where they are on public conservation lands waters.* Appendix 9 lists the Remarkables Conservation Area. The activities proposed at Helicopter Ridge and in the Doolans Basin would not achieve this objective in regards both geological features and landscapes.
 - Outcome 2.3 - Western Lakes and Mountains/Ngā Puna Wai Karikari a Rākaihautū Place *Prominent landscape and geological features (ridgelines, and mountain tops) remain in their natural state or are unmodified beyond their state at the time of becoming public conservation lands and waters.* The placement of the gondola mid-station on Helicopter Ridge as proposed would not achieve this outcome. The ridge would not remain in its natural state.
 - Policy 2.3.22 Western Lakes and Mountains/Ngā Puna Wai Karikari a Rākaihautū Place – *2.3.22 May allow further development and/or expansion of The Remarkables ski field (with the exception of the upper Wye Creek valley) in accordance with Policies 3.25.1-3.25.6 in Part Three, provided that adverse effects (including cumulative effects) are avoided, remedied or mitigated on the following values ... the outstanding natural landscapes and ecological values of The Remarkables and the Tapuae-o-Uenuku/Hector Mountains.* DOC considers that the adverse effects on these values are

high – very high and the measures proposed in the application are not considered to achieve appropriate avoidance, remedy or mitigation of adverse effects to ecological values.

- *Policy 3.1.5 (General) - Manage recreation opportunities, including those provided by concessionaires, in accordance with the visitor management zones shown on Map 3 and as described in Appendix 12.* Helicopter Ridge and the Doolans Basin are in the Backcountry Visitor Management Zone. This does not provide for the activities proposed.
- *Policy 3.10.1 Should apply the following criteria when considering applications to erect or retain structures or utilities or for the adaptive reuse of existing structures on public conservation lands and waters: the purposes for which the lands and waters concerned are held; the outcomes and policies for the Places where activity is proposed to occur; whether the structure could reasonably be located in another location where fewer adverse effects would result from the activity; whether the structure adversely affects conservation, including recreational values; whether the structure is consistent with the visitor management zone on Map 3 and as described in Appendix 12....* The application is largely inconsistent across each the provisions of Policy 3.10.1.
- *Policy 3.25.2 - Should in considering the development of new and existing authorised ski fields apply a precautionary approach to the approval of new structures, accommodation facilities and terrain modification and consider both the likely effects of water use (for snow-making), the likely longevity of the field in the face of climate change, and any appropriate land remediation and facility removal costs should the ski field cease to operate.* Increasing snowmaking (along with the favourable latitude, elevation and aspect of the Doolans Basin) is presented in the application as the means to maintain the longevity of the development over the next 40 years, in the face of climate change. However, no understanding of the likely trajectory of climate change by a suitably qualified professional has been provided with the application in order for the longevity of the field to be properly understood. Beyond what is required for now, the application has not considered the ability to take increasingly more water and to store it in greater amounts over time for the purpose of longevity of the ski activity in the Doolans. The application does not *consider the likely effects of water use (for snow making)* as it relates to *the likely longevity of the field in the face of climate change*. Additionally, it does not address the effect of additional snowmaking on vegetation and

ecosystems. Land remediation and facility removal costs should the ski field cease to operate are proposed to be addressed through a parent company guarantee.

214. For the reasons expressed for the Remarkables Base Concession, the granting of the Doolans Concession for those parts in the Rastus Burn Recreation Reserve (the construction and operation of infrastructure) would be consistent with the CMS; subject to appropriate conditions and understanding Treaty partner interests.
215. In regards the Doolans Concession for the activities sought inside the Remarkables Conservation Area, DOC considers that the Project is consistent with some provisions of CMS; but is not consistent with the most directly applicable provisions as outlined above.

Section 17X Power of Minister to impose and enforce conditions

216. Refer to following 'Conditions' section of this report

Section 17Y - Rents, fees and royalties

217. Rents, fees and royalties would normally be considered in accordance with Section 17Y. Under the FTAA, clause 8(3) applies instead of section 17Y(1).
218. As the concessions are required to facilitate a private activity, DOC considers it appropriate to seek concession fees in relation to the application.
219. The applicant has proposed a concession activity fee of 3.0% of Gross Annual Revenue plus GST relating to the activities listed in the Doolans Concession. DOC considers this an acceptable fee once the area is operational, and the activities are generating revenue.
220. Until the works in the Doolans have ceased and the revenue-generating activities are operational, an annual activity fee of \$10,000 plus GST should apply. This fee is necessary to ensure DOC receives financial return for activities occurring on PCL (given the 3% of Gross Annual Revenue would not yet be generating a fee).
221. The applicant has proposed that the concession fee of 3% Gross Annual Revenue (plus GST) associated with the Doolans Concession (which aligns with their current concession for the Remarkables) also applies to the base building concession, given the activities are operated together. DOC agrees with this proposal.
222. As a precautionary measure should this fee not be imposed by the panel (should an approval progress) DOC directs the panel to impose a s78 condition relating to fees to ensure that an independent valuation is undertaken to inform an appropriate fee.

Section 17Z - Term of concession

223. The applicant is seeking a term of 40 years from the date of approval for both concessions.
224. The existing ski area activities in the Rastus Burn Recreation Reserve are authorised by four concessions. These are:
- a. 91186-SKI – a concession package of lease, licence and easements granted in 2025 that authorise most of the existing ski-field activity in the Rastus Burn Recreation Reserve and access to it via the Remarkables Ski Field access road (for those parts on public conservation lands). The term sought for this concession was 40 years. After much engagement between DOC and NZSki an 'exceptional circumstance' was determined, allowing for a term of more than 30 years. A term of 38 years was granted. This concession package expires on the 30 November 2063.
 - b. OT-34108-SKI Lease - for re-alignment of access road entering into carparks & redevelopment of car park areas. Expires in 2043.
 - c. OT-34109-SKI Easement - Curvey Basin Chairlift, Remarkables, snow making & trail development into Curvey Basin. Expires in 2043.
 - d. 49957-SKI Easement - Remarkables Skifield - installation of underground pipe and intake structure (in Lake Alta) to take water from the lake into the Rastus Burn for the purpose of increasing flows for snowmaking. Expires in 2043.
225. There is no right of renewal for these concessions. When they expire new concessions will need to be applied for.
226. For context, the road to the ski area traverses two landowners. The first section from the Queenstown-Kingston highway is owned by NZSki Limited. This then enters public conservation lands (the Remarkables Skifield Access Road Reserve) as it makes its way up into the Rastus Burn Recreation Reserve. See Figure 2 below.
227. An easement in favour of the Minister of Conservation is held for public access (pedestrian, vehicles and bikes) through those lands owned by NZSki Limited. The term of this easement is contemporaneous with the term of 96118-SKI. NZSki Limited holds an

easement for the use of the Remarkables Skifield Access Road Reserve as part of the 96118-SKI concession package.

228. If the Panel were minded to approve the application, a term that aligns with 91186-SKI expiry of 30 November 2063 would:

- a. better provide the opportunity to consider the activities across both the Rastus Burn and the Doolans Basin and the road easements as a package rather than as individual components. This allows both more holistic assessment of the activity that would now effectively operate as one activity; and would also create administrative efficiencies by running one process rather than two processes in relatively quick succession.
- b. provide better opportunity to consider use of section 17ZG(2)(a) of the Conservation Act, which allows the Minister of Conservation to tender the right to make an application or invite applications for a concession.

229. However, it will be important that Ngāi Tahu and Kā Rūnaka's views on term are understood by the Panel.

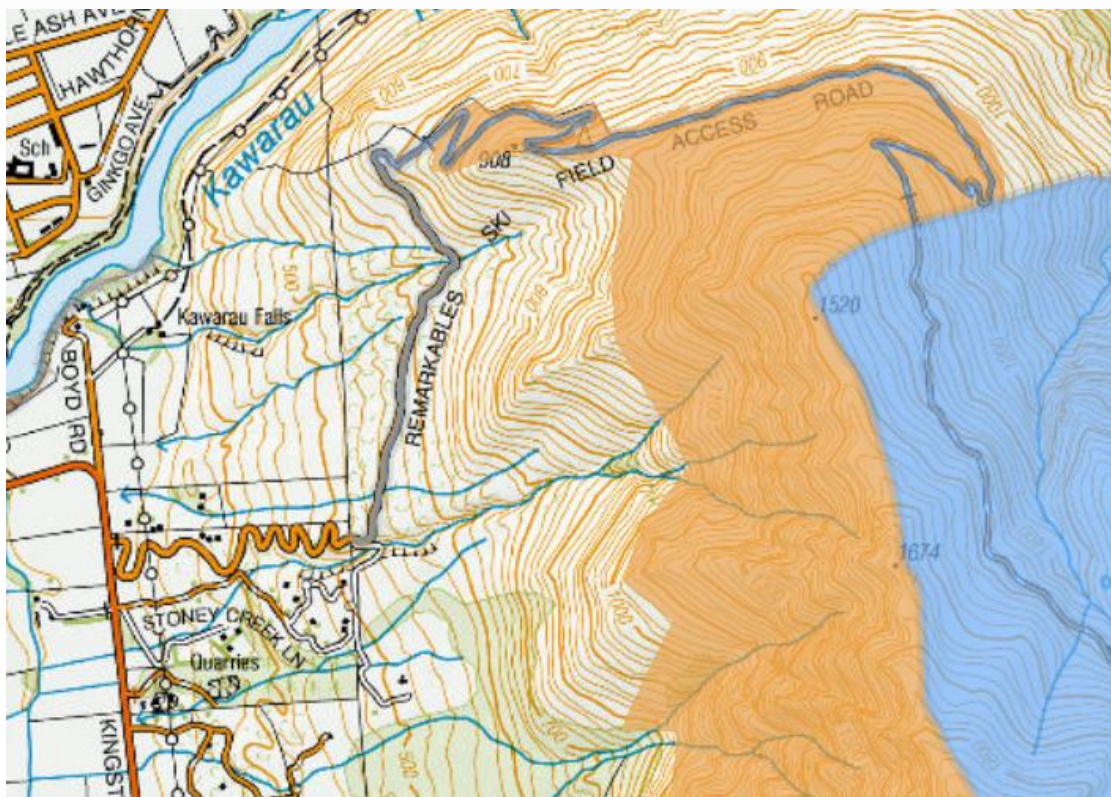


Figure 2 – Access to the Remarkables Ski-field: Remarkables Skifield Access Road Reserve illustrated in grey. Road running from the Highway over private lands illustrated in orange.

Clause 7(1)(a)(iii) – any other relevant provisions of Parts 3, 4, 4A, 5, 5B and 5C of the Conservation Act that direct decision making in relation to Part 3B of that Act

230. For the purpose of Clause 7(1)(a)(iii) only Part 5 Stewardship Areas has relevance.

231. The Doolans Basin and Helicopter Ridge are in the Remarkables Conservation Area, held under section 7 of the Conservation Act 1987 *Land may be acquired and held for conservation purposes.*

232. As a conservation area the Remarkables Conservation Area comes within the definition of a 'Stewardship Area' in section 2(1) of the Conservation Act (not being set aside for any of the other listed purposes). Consequently, it is subject to section 25 Stewardship Areas that *every stewardship area shall so be managed that its natural and historic resources are protected*.

233. Land administered under section 25 can be provided a more formal classification as (for example) a type of reserve, a conservation park or a national park. These classifications more specifically define the purpose for which land is held – e.g. recreation, scientific, or scenic purposes, national park purposes and so on.

234. Until that classification process happens, the Doolans Basin and Helicopter Ridge remain held and administered for *conservation purposes* and are administered consistent with section 25 such that *'every stewardship area shall so be managed that its natural and historic resources are protected'*.

235. The Conservation Act defines natural resources as:

- *plants and animals of all kinds; and*
- *the air, water, and soil in or on which any plant or animal lives or may live; and*
- *landscape and landform; and*
- *geological features; and*
- *systems of interacting living organisms, and their environment;—*

and includes any interest in a natural resource.

236. The Conservation Act defines historic resource as: *a historic place within the meaning of the Heritage New Zealand Pouhere Taonga Act 2014; and includes any interest in a historic resource.*

237. The Conservation Act defines *protection* as:

in relation to a resource, means its maintenance, so far as is practicable, in its current state; but includes its restoration to some former state; and its augmentation, enhancement, or expansion.

238. Until the presence or absence of historic values can be determined, construction of the proposed weir intake at the site proposed may be inconsistent with protecting historic resources.

239. As evidenced in DOC's expert statements of advice, and in particular those in relation to vegetation and ecosystems, freshwater, invertebrates, geomorphology and landscape the Project is inconsistent with Part 5 of the Conservation Act as the *natural resources* will not be *maintained, so far as is practicable, in their current state*. DOC considers they will be significantly adversely impacted.

Clauses 7(1)(a)(iv) and (v)

240. This is not relevant as the applicant has not applied for a concession that would otherwise be applied for under section 14AA of the Wildlife Act or section 49 of the National Parks Act 1980.

Clause 7(1)(a)(vi) – Purpose for which the land is held

241. The application spans the Rastus Burn Recreation Reserve and the Remarkables Conservation Area.

The Rastus Burn Recreation Reserve

242. The Rastus Burn Recreation Reserve was set aside under the Reserves Act 1977 by the Minister of Lands in 1980 following lengthy engagement between the Mount Cook Company and the Land Settlement Board, to develop a ski area here.

243. The Reserves Act 1977 Section 17(1) sets out the purpose of a recreation reserve:

It is hereby declared that the appropriate provisions of this Act shall have effect, in relation to reserves classified as recreation reserves, for the purpose of providing areas for the recreation and sporting activities and the physical welfare and enjoyment of the public, and for the protection of the natural environment and beauty of the countryside, with emphasis on the retention of open spaces and on outdoor recreational activities, including recreational tracks in the countryside.

244. This purpose is constrained by s17(2)

It is hereby further declared that, having regard to the general purposes specified in subsection (1), every recreation reserve shall be so administered under the appropriate provisions of this Act that—

- a. the public shall have freedom of entry and access to the reserve, subject to the specific powers conferred on the administering body by sections 53 and 54, to any bylaws under this Act applying to the reserve, and to such conditions and restrictions as the administering body considers to be necessary for the protection and general well-being of the reserve and for the protection and control of the public using it:*
- b. where scenic, historic, archaeological, biological, geological, or other scientific features or indigenous flora or fauna or wildlife are present on the reserve, those features or that flora or fauna or wildlife shall be managed and protected to the extent compatible with the principal or primary purpose of the reserve:*

provided that nothing in this subsection shall authorise the doing of anything with respect to fauna that would contravene any provision of the Wildlife Act 1953 or any regulations or Proclamation or notification under that Act, or the doing of anything with respect to archaeological features in any reserve that would contravene any provision of the Heritage New Zealand Pouhere Taonga Act 2014:

- c. those qualities of the reserve which contribute to the pleasantness, harmony, and cohesion of the natural environment and to the better use and enjoyment of the reserve shall be conserved*
- d. to the extent compatible with the principal or primary purpose of the reserve, its value as a soil, water, and forest conservation area shall be maintained.*

245. These lands are now in part modified and have been subject in the last thirteen years to significant infrastructure development and upgrades; in parallel with an associated ongoing restoration programme.

246. DOC considers that the activities sought in the Rastus Burn Recreation Reserve are consistent with the purpose for which the land is held.

The Remarkables Conservation Area

247. The Doolans Basin, Helicopter Ridge and a section of lands immediately below Helicopter Ridge on the Rastus Burn side of the ridge are within the Remarkables Conservation Area.

248. These lands are part of the wider Remarkables Conservation Area and were set aside under section 7 of the Conservation Act 1987 (*Land may be acquired and held for conservation purposes*). As the land has not been specially protected or provided with any

other overlay (marginal strip or water course area), the land is stewardship land under the Conservation Act (referring to the definitions of conservation area, and stewardship area under the Act).

249. Section 2(1) of the Conservation Act 1987 defines *conservation* to mean:

‘preservation and protection of natural and historic resources of the purpose of maintaining their intrinsic values, providing for their appreciation and recreational enjoyment by the public, and safeguarding the options for future generations.’

250. ‘Preservation’ is defined, in relation to a resource, as *‘the maintenance, so far as practicable, of its intrinsic values.’*

251. ‘Protection’ in relation to a resource, means *‘its maintenance, so far as is practicable, in its current state; but includes its restoration to some former state, and its augmentation, enhancement, or expansion.’*

252. ‘Intrinsic value’ is defined in the 2005 Conservation General Policy as a concept *which regards the subject under consideration as having value or worth in its own right independent of any value placed on it by humans.*

253. Stewardship areas are managed under s25 of the Conservation Act.

254. Under section 25 *Every stewardship area shall so be managed that its natural and historic resources are protected.* Natural resources and historic resources are defined above under the Clause 7(1)(a)(iii) considerations.**Error! Bookmark not defined.**

255. While the Project would provide for recreational enjoyment by the public, as discussed above, DOC is of the view that the natural resources will not be protected or maintained, so far as is practicable, in their current state. DOC considers they will be significantly adversely impacted.

256. Until the presence or absence of historic values can be determined, construction of the proposed weir intake at the site proposed may also be inconsistent with protecting historic resources, as required by lands held for conservation.

257. DOC considers that, based on the experts’ review of the application, the Project is not consistent with the purpose for which the land in the Remarkables Conservation Area is held.

Clause 7(1)(a)(vii), (viii) and (ix)

258. None of these clauses are applicable.

Clause 7(1)(a)(x) – Status, ownership, administration of the land

259. The status of the land subject to the proposed concessions is the Rastus Burn Recreation Reserve and the Remarkables Conservation Area.

260. DOC is responsible for administering this land on behalf of the Crown.

Clause 7(1)(a)(xi) – Existing arrangements in relation to the land

261. Clause 7(1)(a)(xi) requires consideration of whether the land is subject to any existing arrangements that create obligations in relation to the land. Clause 7(3)(b) requires that the Panel must decline approval if giving effect to the approval would result in the conferral of an interest in land that is incompatible with an existing interest in land.

262. Arrangements with DOC in relation to the Project area are limited to active concessions (leases, easements, licences and permits) and hunting permits.

263. With some exceptions, the DOC concessions database does not extend to the granularity of the Remarkables Ski Area or the Doolans Basin, but only as far as the Rastus Burn Recreation Reserve and the Remarkables Conservation Area.

264. Those exceptions (concessionaires whose concessions refer explicitly to the Doolans Basin or sites that directly adjoin it) and those who *may* operate within the Project area are listed in **Appendix D**. The names associated with concessions held by individuals have been withheld. This list does not include those concessions held by the applicant.

265. Excluding those held by the applicant, there are no leases or easements granted to other parties that are inside the Project area.

Licences

266. There are five active licences that operate in or bordering the Project area. One of these is for helicopter skiing, one for guiding tours and three are for helicopter landings.

267. Licences do not create an exclusive interest in the land. Potential incompatibility with the helicopter-skiing requires further assessment. It is understood that the Panel has invited section 53 comment from the licence holders.

Permits

268. There are numerous permits (for guiding, research and collection, Wildlife Act purposes, filming and photography, vehicles) granted in the wider Rastus Burn Recreation Reserve and the Remarkables Conservation Area.

269. Permits do not create an interest in the land.

270. In terms of likely actual use, while any permits granted for the Rastus Burn Recreation Reserve are highly likely to use the existing ski area (in many cases likely just to transit through) it is not possible to determine what use these permits make of the Doolans Basin. DOC understands that the Panel has asked at least some permit holders for their comment under section 53 of the Fast Track Act.

Hunting Permits

271. The Doolans Basin is part of the wider Remarkables Wye Creek Hunting Block. This is an Open Hunting Area. Open hunting permits are free and last 12 months.

272. Over the last five years there have been an average of 5,100 hunting permits per annum issued for the wider Remarkables, made up of the two hunting blocks, being:

- Remarkables Wye Creek hunting: Central Otago and The Remarkables, Otago
- Remarkables Nevis hunting: Central Otago and The Remarkables, Otago

273. It is not currently possible to drill down to the level of just the Remarkables Wye Creek Hunting Block, nor the Doolans Basin.

274. Hunting is not authorised in the Rastus Burn Recreation Reserve, or certain other parts of the Remarkables Conservation Area such as the area around Lake Alta.

Clause 7(1)(a)(xii) – Legal and financial liabilities

275. The legal and financial liabilities associated with decisions on leases, licences and easements have been considered. Save for the panel receiving more fullsome information from the applicant on the management of natural hazards; DOC considers these matters are adequately covered by the Department's Standard terms and conditions

and the additional 'Special Conditions' proposed. These include conditions relating to health and safety, insurance, fee reviews, interest penalties, and defaults.

276. However, DOC considers a precautionary approach is warranted due to the scale of the development and uncertainties around the levels of Crown risk and liabilities. Consequently, the Director-General of Conservation directs the use of Section 78 conditions, but only in the event that DOC's required conditions are not agreed to or imposed by the Panel. This is discussed further below.

Clause 7 (1)(b) may consider,

277. The Panel may consider –

- *in the case of an approval referred to in paragraph (a) of the definition of concession or paragraph (a) of the definition of Reserves Act approval, any policy statement or management plan of the Crown (other than a strategy or plan referred to in paragraph (a)(vii):*
- *in the case of an approval within paragraph (b) of the definition of Reserves Act approval, any reserve management plan of the administering body (other than a plan referred to in paragraph (a)(ix).*

278. 2005 Conservation General Policy and the 2016 Otago CMS are relevant to this application. Advice regarding these has been set out previously - refer to Clause 7(1)(a)(ii) – Part 3B of the Conservation Act; Section 17W Relationship with Conservation Management Strategies and Plans. A more full analysis is also appended to the DOC Covering Report.

279. There is no Reserve Management Plan for the Rastus Burn – management is now covered by the CMS.

Conditions

280. Schedule 6, clause 8 provides that the Panel may impose such conditions as they consider appropriate. Clause 9 provides that the Panel must impose any conditions that the Director-General of Conservation indicates are relevant from those specified in accordance with section 78.

281. The substantive application documents include draft concession documents, including proposed conditions, for the two concessions sought.

282. The applicant's proposed conditions are based largely around the existing ski area concession for the Remarkables Ski Area 96118-SKI. 96118-SKI is for existing (in-situ) ski field infrastructure and services and the continuation of an existing ski-area operation. While DOC is comfortable in using the existing concession as a base document, there needs to be accommodation made for the proposed scope of additional construction upgrades and expansion. Accordingly, DOC seeks some amendments to the conditions to this effect.

283. These are set out as tracked changes in:

- **Appendix A** - Draft Concession (Lease and Easement) for the Remarkables Base Concession (upgrades on the existing ski field)
- **Appendix B** - Draft Concession (Lease, Licence and Easement) for the Doolans Concession (Doolans expansion).

Section 78 Conditions

284. The Minister of Conservation approved a suite of section 78 conditions in July 2025. The Director-General has discretion to require the panel to impose section 78 conditions where relevant. The conditions specified must be considered appropriate in order to manage risks to, and potential liabilities of, the Crown arising from the granting of an approval of that kind.

285. Should the application be approved, DOC is comfortable with the conditions proposed by the applicant, subject to the changes 'tracked changed' at **Appendices A and B**. However, should these changes not be accepted by the applicant or the panel, DOC directs the Panel to impose the s78 conditions provided in the table below. A full set of s78 conditions is provided at **Appendix C** for reference.

286. DOC notes that there is some overlap between the concession conditions sought by DOC and the s78 conditions. DOC has purposefully included s78 conditions that overlap with the concession conditions because DOC seeks to ensure that if a concession condition is not specified by the Panel, then an appropriate s78 condition will be imposed. Should the conditions sought by DOC be accepted by the Panel, then it is likely that many s78 conditions will not be required.

Table 1: Section 78 conditions to be imposed

Condition Type	Purpose	s78 Condition Reference (see Appendix C for full wording of the condition)
Health and Safety Obligations	Manage health and safety risk and liability no conditions pro-offered by applicant	1 (1.1-1.8) 2 (2.1.1-2.1.10)
Bonds and sureties (including guarantee)	Manage financial risk and crown liability	3 (3.1-3.7) 4; 4.1 (4.1.1-4.1.2), 4.2 (4.2.1-4.2.5)
New structures and land alterations	Manage financial risk and crown liability	5; 5.1 (5.1.1-5.1.2) 7 (7.1-7.3)
Removal of structures or other improvements	Manage financial risk and crown liability	6 (6.1-6.4)
Rehabilitation and Closure Plan	Manage financial risk and crown liability	8 (8.1-8.4)
Property of the Minister	Manage financial risk and crown liability	9 (9.1)
Fees – Concessions Fees	Manage financial risk and crown liability	10 (10.1-10.4)
Concession Fee review	Manage financial risk and crown liability	11 (11.1-11.2)
Other Charges	Manage financial risk and crown liability	12 (12.1-12.3)
Costs	Manage financial risk and crown liability	13 (13.1-13.3)
Liabilities	Manage financial risk and crown liability	14 (14.1-14.7)
Insurance	Manage financial risk and crown liability	15 (15.1-15.4)
Bankruptcy or insolvency	Manage financial risk and crown liability	16 (16.1-16.2)
Compliance	Manage financial risk and crown liability	17 (17.1-17.3)
Compensation for unauthorised disturbance	Manage financial risk and crown liability	18 (18.1)

Suspension of the Concession	Manage financial risk and crown liability	19 (19.1-19.5)
Termination of the Concession	Manage financial risk and crown liability	20 (20.1-20.3)
Monitoring	Manage financial risk and crown liability	21; 21.1 (21.1.1-21.1.2)
Heritage	Ensuring reasonable care to comply with Heritage New Zealand Pouhere Taonga Act 2014 which is relevant in terms of the heritage landscape.	22 (22.1)
Others Services	Provide protection for the Crown against additional liabilities by ensuring that other users services are not interfered with	23 (23.1)
Variations	Manage financial risk and crown liability	24 (24.1)
Occupation beyond term end	Provide protection for the Crown against additional liabilities. Allow permission to function by agreement after a permission has come to an end.	25 (25.1)

Compensation

287. Where avoidance, remedy, mitigation and offsetting have not occurred, should the Panel be inclined to grant these concessions as sought, Section 17X(d) of the Conservation Act 1987 allows for the payment of compensation for any adverse effects of the activity on the Crown's or public interest in the land concerned, unless such compensation has been provided for in the setting of rent. No compensation has been provided for in the setting of rent.
288. DOC considers that the Project will have significant residual adverse effects that have not been avoided, remedied, mitigated or offset. While compensation is offered, it is based primarily on a capped-cost approach, with funding allocated to broad conservation purposes rather than being derived from clearly defined outcomes that DOC considers appropriately respond to the proposal's impacts.
289. This is explained in detail in the statements of advice appended to the DOC covering report, including that of Dr Fleur Masyk on *Effects Management, including compensation*. Therefore, it is DOCs view that, should the panel be minded to approve the application, compensation should be focussed on tangible positive outcomes that responds to the landscape and ecosystem level of adverse effects.

Appendices

Appendix A: Proposed Concession conditions - 'Remarkables Base Concession

Appendix B: Proposed Concession conditions - 'Doolans Concession'

Appendix C: s78 FTAA conditions

Appendix D: Existing arrangements in relation to the land