23 October 2026

Vicki Morrison-Shaw
Expert Panel Chair

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Tēnā koutou,

Attention: The Chair and Members of the Expert Panel for the Remarkables Ski Area Upgrade and Doolans Expansion Project

NZSki Limited – Fast-track Consent Application – Otago Regional Council comments on the substantive application for the Remarkables Ski Area Upgrade and Doolans Expansion Project [FTAA- 2605-1236] pursuant to invitation under section 53(2) of the Fast-track Approvals Act 2024.

Otago Regional Council has reviewed the substantive application for the Remarkables Ski Area Upgrade and Doolans Expansion Project and provides the following written comments, pursuant to the Panel's invitation under section 53(2) of the Fast-track Approvals Act 2024 (FTAA).

These comments summarise ORC's overall feedback on the proposal. The comments are supported by Appendices 1 - 6.

Nāku iti noa, nā

Joanna Gilroy
General Manager Environmental Delivery

SECTION A: EXECUTIVE SUMMARY

1. In accordance with s53(2) of the Fast-track Approvals Act 2024 (**FTAA**) Otago Regional Council (**ORC**) has been invited to provide comment on the substantive application for the Remarkables Ski Area Upgrade and Doolans Expansion Project (**the application**) lodged by NZSki Limited (**the Applicant**).

2. This document and its appendices represent ORC's 'comments' provided in response to that invitation.

3. These comments have been prepared by Angela Fenemor, Consultant Planner from Incite on behalf of ORC.

4. The purpose of these comments is to summarise ORC's assessment of the application to assist the Expert Panel (**the Panel**) in making its decision on the application under s81 of the FTAA. ORC's comments focus on the regional resource consents sought by the Applicant, which would otherwise be required under the Resource Management Act 1991 (RMA).

5. The overall activity status for the RMA approvals sought is non-complying under the relevant regional plans and national environmental standards. The Applicant has not sought approval for any activity that would be prohibited under any regional plan or national environmental standard.

6. These comments summarise the actual and potential adverse effects of the proposal, as ORC understands them. It also considers any benefits and whether these are regionally or nationally significant. Consideration is given to whether the purpose of the FTAA would be met by granting the approvals sought, on appropriate conditions.

7. ORC considers that the proposal is a development project with economic benefits that are of regional significance. Accordingly, ORC considers that the purpose of the FTAA would be met by facilitating delivery of the proposal (leaving to one side the adverse effects of the proposal and the issue of whether they are sufficiently significant to be out of proportion to the proposal's regional or national benefits).

8. ORC has also identified potential adverse effects of the proposal and has assessed these carefully to determine their nature and significance.

9. ORC understands that the FTAA imports most RMA provisions relevant to the assessment of resource consent applications, with necessary modifications. Accordingly, and to assist the Panel, ORC has also provided an assessment of the proposal against the relevant objectives and policies of statutory instruments, as well as an assessment against the sections of the RMA that direct decision making. ORC further notes a number of 'other matters' that it considers relevant and reasonably necessary to consider in order to determine this application.

10. ORC has identified key issues with the proposal and summarises these in Table 1. For the avoidance of doubt, this is not an exhaustive list of issues, nor is it a summary of ORC's conclusions or final opinions on these issues. It is simply a list of matters relevant to ORC's jurisdiction that ORC recommends the Panel consider carefully as this process continues and in its deliberations. These issues and others are discussed at length in subsequent sections of these comments.

11. Consistent with the position taken by ORC on other applications under the FTAA within the Otago region, in its comments ORC does not address the ultimate question for the Panel to determine, namely whether the approvals sought should be granted (including in light of the considerations set out in section 85 of the FTAA). Rather, ORC sees its role as providing the Panel with careful analysis on matters relevant to ORC's jurisdiction to allow the Panel itself to carry out the necessary weighting exercise.

Table 1 *Summary of key issues identified by ORC*

Key issue	**Risk**
Loss of Tarn 3 and the associated intermittent stream (reservoir footprint)	Permanent loss of a very high value alpine freshwater feature. The Applicant has not adequately demonstrated that the loss can be avoided to the extent reasonably practicable, including by using water from Lake Alta under its existing water permit. Consistency with the National Policy Statement for Freshwater Management (NPS-FM) Policies 6 and 7 and clause 3.22, and National Environmental Standard for Freshwater (NES-F) regulation 45, has not been demonstrated. This should be considered by the Applicant.
Direct and indirect effects on natural inland wetlands	Approximately 0.20 to 0.23 ha of direct disturbance of naturally uncommon wetland types that support 'Threatened' and 'At Risk' plants. Total habitat loss (approximately 0.65 ha of Tarn 3) has not been clearly addressed by the Applicant. The effectiveness of proposed mitigations (including permeable track sections and trench bulkheads) has not been demonstrated. The operational effects of snowmaking and grooming on cushion bog and string mire have not been assessed by the Applicant. This should be considered by the Applicant.
Alternatives for tracks, crossings and infrastructure layout	The Applicant has not demonstrated that effects on high-value wetlands have been avoided or minimised to the extent practicable.

Biodiversity compensation	The Applicant has no ecological 'accounting' to show that gains will be commensurate with the residual losses. The proposed Lake Alta boardwalk does not provide a demonstrated ecological gain. This should be considered by the Applicant.
Wastewater discharge: 750 kg/year total nitrogen limit	The limit proposed does not reflect historical discharges. Conservative modelling indicates possible guideline exceedances at low flow, including ammonia toxicity.

SECTION B: INTRODUCTION

12. ORC understands that the Panel will have read all information pertaining to the application that is available on the Remarkables Ski Area Upgrade and Doolans Expansion Project Fast-track substantive application webpage (including the updated application documents provided by the Applicant on 4 September 2026).[1] These comments have been prepared in that context.

13. Following lodgement of the application, communication between ORC and the Applicant has been open and helpful. Following lodgement (but prior to receiving an invitation to provide comment under s53(2)) ORC and its expert advisors have invested time and effort into:

a) understanding the application as proposed;
b) identifying key issues and areas of disagreement or contention; and
c) attempting to narrow those issues through various mechanisms, including written requests for information, multiple meetings between the Applicant, ORC, and their respective expert advisors, workshops, and site visits.

14. The purpose of this work was to enable ORC to provide fulsome and considered s53(2) comments, with a view to providing the greatest possible assistance to the Panel and the decision it must ultimately make on this application.

15. A summary of the engagement process that has occurred since the application was lodged is provided below:

a. Wastewater – workshops with experts on 30 July 2026 and 11 August 2026;
b. Wetlands, streams and crossings – workshop with experts on 4 August 2026; and
c. Effects management – workshop with experts on 15 September 2026.

16. This document setting out ORC's comments is structured in the following way:

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

- SECTION C: PURPOSE OF THE FTAA
- SECTION D: ASSESSMENT OF EFFECTS
- SECTION E: POLICY ASSESSMENT
- SECTION F: MANAGEMENT PLANS
- SECTION G: CONSENT CONDITIONS
- SECTION H: OTHER MATTERS
- SECTION I: OTHER LEGISLATION THAT DIRECTS DECISION MAKING
- SECTION J: WHEN AN APPROVAL MUST OR MAY BE DECLINED
- SECTION K: CONCLUSIONS

17. The following documents are provided as appendices to these comments:

- Appendix 1: Technical Expert Report: Andrew Rossaak - Wetlands
- Appendix 2: Technical Expert Report: Michael Greer – Freshwater ecology and water quality
- Appendix 3: Technical Expert Report: Charlotte Lockyer - Hydrology
- Appendix 4: Technical expert memorandum: Tim Baker - Wastewater Treatment System
- Appendix 5: Technical comment memo: Dam safety
- Appendix 6: Preliminary comments on conditions

SECTION C: PURPOSE OF THE FTAA

18. The purpose of the FTAA is to facilitate the delivery of infrastructure and development projects with significant regional or national benefits.[2] When taking into account the purpose of the FTAA the Panel must consider the extent of the project's regional or national benefits.[3]

19. To assist the Panel, Council has considered:
    a) the benefits of the application (Section C.1); and
    b) whether the benefits are regionally or nationally significant (Section C.2).

SECTION C.1 – BENEFITS

20. The Applicant identifies anticipated benefits of the Project (Section 6.2, Part A of the Substantive Application), which is not repeated here.

21. ORC has relied on the peer review of the Applicant's Economic Assessment[4] undertaken by Natalie Hampson (Savvy Consulting Limited) for Central Otago District Council (CODC). During pre-application consultation, it was agreed that CODC would commission a technical peer review of the Applicant's economic assessment, rather than ORC commissioning a separate review. This approach

[2] FTAA section 3
[3] FTTA section 81(4)
[4] Report B-01 Economic assessment of the Remarkables Ski Area Upgrade and Doolans Expansion Updated 9 June 26

was intended to avoid duplication of effort, with the findings of CODC's review to be shared with ORC.

22. The peer review concludes that, while the economic benefits estimated by the Applicant may be overstated, the Project is nevertheless likely to generate significant economic benefits, particularly within the Queenstown Lakes District, with more limited benefits across the wider Otago region. ORC accepts these conclusions and considers that the Project is likely to generate economic benefits of significance to the Otago regional economy. The significance of these benefits is considered further in Section C.2.

SECTION C.2 – REGIONAL OR NATIONAL SIGNIFICANCE

23. The FTAA does not contain a definition of significant regional or national benefits. However, in relation to a referral application, s22(2) lists a number of criteria that the Minister may consider when determining whether a project is an infrastructure or development project that would have significant regional or national benefits.

24. ORC has considered these matters in forming a view on whether the benefits of the Project are of regional or national significance.

25. As outlined above, the Project is anticipated to generate economic benefits through increased tourism expenditure, employment opportunities and associated economic activity. ORC has relied on the CODC's commissioned peer review of the Applicant's Economic Assessment, which concludes that, notwithstanding some uncertainty regarding the scale of the benefits, the Project is likely to generate economic benefits of significance to the Otago regional economy, with the majority of those benefits concentrated within the Queenstown Lakes District.

26. The Project is also anticipated to provide recreational benefits through increased ski area capacity and opportunities for skiing, which have been considered as part of the economic assessment. The Applicant has also identified benefits associated with climate change resilience and reduced reliance on private vehicle transport. While these benefits may arise, limited supporting information has been provided to demonstrate their likely scale or significance, particularly at a regional or national level.

27. On balance, ORC considers that the Project is likely to generate benefits of regional significance, primarily through its economic benefits. However, there is insufficient information to conclude that the other benefits identified by the Applicant would, individually or collectively, be significant at a regional or national level.

SECTION C.3 – IS THE PURPOSE OF THE FTAA MET?

28. The Applicant considers the proposal will result in a range of benefits as summarised in the section above.

29. Overall, ORC considers that the proposal, when assessed as a whole, is likely to provide significant regional benefits for the purposes of the FTAA. However, ORC notes that its involvement is limited to approvals outlined in Section D.3 within its functions. While these approvals are necessary to facilitate the proposal overall, the regional benefits identified above arise from both the construction-phase works and the ongoing use of the expanded ski area, rather than from the approvals required from ORC in isolation.

SECTION D: ASSESSMENT OF EFFECTS

D.1 STRUCTURE OF THIS SECTION

30. The application material is extensive. Further, ORC has been provided with a suite of additional information as a result of requests for information, various workshops with the Applicant and other agencies, and other information volunteered by the Applicant. This additional information is referenced throughout these comments.

31. Taking all of this information into account, this section seeks to summarise ORC's understanding of the proposal and its adverse effects (in sufficient detail that the reader does not have to make frequent reference to other documents) and to provide ORC's comments on the proposal against that background.

32. ORC's comments are informed by the opinions of experts it has engaged to advise on various technical matters. The written advice provided by these experts is referenced in the relevant sections below and is attached to these comments.

33. ORC has limited its assessment to the actual and potential adverse effects of activities that would otherwise require regional resource consents from ORC under the RMA.

D.2 LIMITATIONS OF ASSESSMENT

D.2.1 Matters not Assessed by Council

34. Council has not assessed the following subject matters, on the basis that these matters are not directly related to an approval that would otherwise be sought from ORC, or because these matters are better assessed by others:

a) Heritage
b) Roading and traffic
c) Noise and vibration
d) Lighting
e) Recreation
f) Cultural effects (specifically discussed below)
g) Terrestrial ecology

h) Natural hazards

D.2.2 Effects on Cultural Values, Practices, and Beliefs

35. Council has not undertaken an assessment of the potential adverse effects that the proposal may have on cultural values, practices, and beliefs. This is not to diminish the importance of these effects, but to recognise that it is for mana whenua to determine how a proposal impacts on their cultural values.

36. The enduring kaitiakitaka responsibility of mana whenua in relation to te taiao is acknowledged by ORC.

37. ORC understands that the following groups have been invited to provide comments on this application:

- Relevant iwi authorities, namely Te Rūnanga o Ngāi Tahu, in accordance with s53(2)(b);
- Relevant Treaty settlement entities

38. ORC considers that these are the appropriate persons to speak to the actual or potential effects of the proposal on Kāi Tahu cultural values, practices, and beliefs.

SECTION D.3 – APPROVALS SOUGHT

39. The Applicant seeks approvals under the FTAA for activities that would otherwise require resource consent from ORC under the RMA. These are listed in Table 2:

RMA section	Activity requiring consent	Relevant National Environmental Standard /Plan	Relevant regulation/ rule	Activity status
Section 9 RMA	Earthworks outside a 10m but within a 100m setback from a natural inland wetland	NES-FW	45(3)	Discretionary
Section 13 RMA Use of river and lake beds	Erection of any structure in under, over the bed of a river and lake (including the tarn)	Regional Plan: Water for Otago (RPW)	Rule 13.2.3.1	Discretionary
	The alteration of the bed of any lake or river	RPW	Rule 13.5.3.1	Discretionary
	The alteration of the bed of a regionally significant wetland	RPW	Rule 13.5.3.2	Discretionary
	Removal of vegetation for the bed of a regionally significant wetland	RPW	Rule 13.7.3	Discretionary
	The erection of defences against water	RPW	Rule 14.3.2.1	Discretionary

	Vegetation clearance within, or within a 10 m setback from a natural inland wetland	NES-FW	45(1)	Discretionary
	Earthworks or land disturbance within, or within a 10m setback from, a natural inland wetland	NES-FW	45(2)	Discretionary
	The placement, use, alteration, extension, or reconstruction of a culvert in, on, over, or under the bed of a river	NES-FW	71(1)	Discretionary
	Construction of a weir	NES-FW	73(1)	Discretionary
Section 14 RMA Water permit	Water take from Doolans Creek	RPW	Rule 12.1.4.6	Discretionary
	Diversion of water within a regionally significant wetland for the purposes of constructing and operating the road culverts along the Doolans access road and water take access road	RPW	Rule 12.3.1A	Non-complying
	Diversion of water for the purposes of constructing and operating the road culverts along the Doolans access road and water take access road, the construction of a weir	RPW	Rule 12.3.4.1	Discretionary
	The damming of the tarn	RPW	Rule 12.3.4.1	Discretionary
	The taking, use, damming, or diversion of water within, or within a 100m setback from, a natural inland wetland (for the construction of the reservoir)	NES-FW	45(4)	Discretionary
Section 15 RMA Discharge permit	Onsite wastewater treatment and discharge	RPW	Rule 12.A.2.1	Discretionary
	The discharge of stormwater, erosion and sediment control discharge and wastewater fields discharge within, or within a 100m setback from, a natural inland wetland	NES-FW	45(5)	Discretionary

SECTION D.4 – EFFECTS ASSESSMENT

D.4.1 Introduction

40. In accordance with Schedule 5 (clauses 5(4), 6 and 7) of the FTAA, the application includes an assessment of the actual and potential environmental effects of constructing, operating and maintaining the Project.

D.4.2 Information received and assessed

41. The following application documents are of particular relevance to this assessment:

Part A – Substantive application, including the following updated documents:

- A-10 Substantive Application Report Section 3 Project Description Updated 3 September 2026
- A-14 Sub App Section 7 Management and Monitoring of Actual and Potential Effects Updated 3 September 2026
- A-08 Substantive Application Report Section 1 Introduction Updated 3 September
- A-11 Substantive Application Report Section 4 Approvals Required Updated 3 September
- A-13 Substantive Application Report Section 6 Assessment of Environmental Effects Updated 3 September 2026
- A-16 - Substantive Application Report - Section 9 Approvals Relating to the Resource Management Act 1991 Updated 3 September 2026
- A-17 - Substantive Application Report - Section 10 Approvals Relating to the Conservation Act Updated 3 September 2026
- A-18 Substantive Application Report Section 11 Approvals relating to Wildlife Act Updated 3 September 2026
- A-21 Effects Management and Compensation Overview Addendum

Part B – Technical reports and drawings

- Economic assessment of the Remarkables Ski Field expansion project
- Remarkables Ski Area Upgrade & Doolans Expansion – Overview of Ngāi Tahu Treaty Settlements
- Remarkables Ski Area Upgrade and Doolans Expansion - Doolans Creek water take assessment of effects
- Remarkable Ski Area Upgrade and Doolans Expansion – Freshwater ecological impact assessment
- Remarkable Ski Area Upgrade and Doolans Expansion - Rastus Burn wastewater freshwater ecological impact assessment
- Remarkable Ski Area Upgrade and Doolans Expansion – Wastewater discharge impact assessment
- Remarkables Ski Area Upgrade and Doolans Expansion – Terrestrial ecology impact assessment
- Remarkable Ski Area Upgrade and Doolans Expansion - Roading, stream crossings and stormwater, freshwater ecological and hydrological impact assessment
- Remarkables Ski Area Upgrade and Doolans Expansion - Stormwater concept report
- Remarkables Ski Area Upgrade and Doolans Expansion – Doolans wastewater concept report
- Remarkables Ski Area Upgrade and Doolans Expansion - Wastewater treatment and disposal feasibility report
- Remarkables Ski Area Upgrade and Doolans Expansion - Reservoir concept report
- Remarkables Ski Area Upgrade and Doolans Expansion - Water intake concept report

- Remarkables Ski Area Upgrade and Doolans Expansion – Construction management framework
- Remarkables Ski Area Upgrade and Doolans Expansion – Erosion and Sediment Control Assessment
- Remarkables Ski Area Upgrade and Doolans Expansion – Construction environmental management plan
- Remarkables Ski Area Upgrade and Doolans Expansion – Terrestrial ecology management plan
- B-01 Economic assessment of the Remarkables Ski Area Upgrade and Doolans Expansion Updated 9 June 26
- B-08 Doolans Creek Water Take Assessment of Effects 26 Aug 26
- B-09 Freshwater Ecological Impact Assessment 27 Aug 26
- B-10 Rastus Burn Wastewater Freshwater Ecological Impact Assessment 28 Aug 26
- B-11 Wastewater Discharge Impact Assessment 28 Aug 26
- B-12 Terrestrial Ecology Impact Assessment 26 Aug 26_Redacted_Part1
- B-14 Tracks, Crossings, Stormwater Freshwater Ecological and Hydrological Impact Assessment Updated 27 Aug 26
- Periphyton Risk Assessment Rastus Burn Wastewater 28 Aug 26
- Response to ORC re B-12 Terrestrial Ecology Impact Assessment 26 Aug 26
- Response to DOC re B-12 Terrestrial Ecology Impact Assessment 26 Aug 26
- Response to CDCO re B.01 Economics Assessment 31 July 2026
- Response to DOC re B-08 Doolans Creek Water Take 26 Aug 26
- Response to ORC and DOC re B.09 Freshwater Ecological Impact Assessment 27 Aug 26
- Response to ORC re B.10 Rastus Burn Wastewater Freshwater Ecological Impact Assessment 28 Aug 26
- Response to ORC re B.11 Wastewater Discharge Impact Assessment 27 Aug 26
- Response to ORC re B.14 Tracks Crossings Stormwater Freshwater Ecological and Hydrological Impact Assessment 27 Aug 26
- Response to ORC re B-08 Doolans Creek Water Take 26 Aug 26

Part D – Existing authorisations

- Regional Consent RM11.368.03 & RM11.368.04 - Lake Alta and Rastus Burn snow making water take
- Regional Consent RM14.336.01 - Rastus Burn wastewater discharge permit
- Regional Consent RM16.115.01 – Rastus Burn potable water take

Part F – Management plans

- Remarkables Ski Area Upgrade and Doolans Expansion – Construction environmental management plan
- Remarkables Ski Area Upgrade and Doolans Expansion – Terrestrial ecology management plan

Part G – Rules assessment

- G-01 Part G - Remarkables Ski Field Expansion - Rules Assessment Updated 3 September 2026

Part H – Proposed conditions

- Conditions matrix
- H-02 Resource Consent Conditions Updated Updated 3 September 2026

42. During the processing of the application, ORC's technical experts reviewed the Applicant's assessments and identified matters requiring further information, clarification or amendments to the proposal. An iterative consultation process followed, during which the Applicant responded to the matters raised, provided additional technical information and, in some instances, revised its assessments and proposed consent conditions.

43. The Applicant's responses to the key matters raised by ORC's experts are documented in the following reports:

a) Response to ORC and DOC re B.09 Freshwater Ecological Impact Assessment 27 Aug 26
b) Response to ORC re B.10 Rastus Burn Wastewater Freshwater Ecological Impact Assessment 28 Aug 26
c) Response to ORC re B.11 Wastewater Discharge Impact Assessment 27 Aug 26
d) Response to ORC re B.14 Tracks Crossings Stormwater Freshwater Ecological and Hydrological Impact Assessment 27 Aug 26
e) Response to ORC re B-08 Doolans Creek Water Take 26 Aug 26

D.4.3 Advice received

44. ORC sought the following expert advice in relation to the Project:

a) Dam assessment for the reservoir: Colin Macdiarmid, Principal Geotechnical Engineer (CPEng), GeoSolve Limited
b) Wastewater treatment plant and land-based treatment of wastewater discharges: Tim Baker, Practice Manager - Hydrology and Hydrogeology, SLR
c) Hydrology: Charlotte Lockyer, Hydrologist, SLR
d) Surface water quality and ecology: Michael Greer, Freshwater Scientist, Torlese Environmental Ltd
e) Wetland ecology: Andrew Rossaak, Ecologist, Morphum Ltd

45. The peer-review reports are attached to these comments as Appendices 1-5.

46. ORC has considered the Applicant's assessment of environmental effects, the additional information and amendments provided in response to technical reviews, and the specialist advice obtained by ORC in relation to its regional council functions.

47. Given the iterative review process described above, the following assessment focuses primarily on the residual matters that remain outstanding, rather than revisiting all issues identified during the initial technical reviews. Where earlier concerns have been satisfactorily resolved through additional information, amendments to the proposal or revised consent conditions, this is acknowledged.

48. The assessment therefore reflects the current proposal and the conclusions reached by ORC's experts following consideration of the Applicant's responses. It identifies those effects that ORC considers can be appropriately managed, together with any remaining uncertainties or concerns relevant to the Panel's determination.

Effects on hydrology – Water take from Doolans Creek

49. The Project involves taking water from the Doolans Creek Right Branch for snowmaking, potable water supply and limited firefighting storage, with water stored in a proposed 19,000 m^3 reservoir.

50. ORC's hydrology expert, Charlotte Lockyer, has reviewed the proposed take and generally agrees with the Applicant's assessment. In particular:

- The proposed maximum abstraction rate is 30 L/s, subject to a maximum annual allocation of 41,240 m^3.
- The Applicant has increased the proposed minimum residual flow from 20 L/s to 33.5 L/s, equivalent to approximately 50% of the estimated mean annual low flow at the intake.
- Although the maximum instantaneous take represents approximately 45% of the estimated mean annual low flow, the annual allocation is relatively small, equivalent to approximately 16 days of continuous abstraction at the maximum rate.
- Abstraction is expected to occur intermittently, primarily during the snowmaking season, with the reservoir remaining full for much of the year.

51. Ms Lockyer concludes that the hydrological effects of the proposed take will be low and that the requested allocation represents a reasonable and efficient use of water. She supports the increased residual flow and has identified no outstanding matters or additional conditions required.

52. ORC's freshwater ecology expert, Dr Michael Greer, has also reviewed the potential effects of the proposed abstraction on aquatic life, including the implications of reduced flows for freshwater habitat and ecological values. His initial review identified matters requiring further clarification, which the Applicant has since addressed through additional information[5] and amendments to the proposed conditions.

53. Dr Greer considers that the Applicant has now adequately addressed the matters raised in his earlier review. He concludes that the proposed water take is unlikely to result in significant adverse effects on aquatic life, subject to the proposed abstraction regime and residual flow requirements. He has not identified any outstanding freshwater ecology matters that would prevent this conclusion being reached.

54. Accordingly, ORC considers that the adverse hydrological and associated freshwater ecological effects of the proposed water take are likely to be low, subject to the proposed residual flow and monitoring conditions.

[5] As set out in the Applicant's report "Response to ORC re B-08 Doolans Creek Water Take 26 Aug 26", which forms part of the Substantive Application

Effects on wetlands and tarns

55. The Project will result in the direct loss and disturbance of natural inland wetlands and the reclamation of Tarn 3 to establish the proposed water storage reservoir. ORC engaged Andrew Rossaak to review the effects on wetland and tarn ecology.

56. Mr Rossaak identifies significant concerns with the Applicant's assessment and proposed management of effects. In particular:

- The Doolans Basin contains naturally uncommon wetland ecosystems, including cushion bog, seepage wetlands, riparian wetlands and string mire. These ecosystems have very high ecological values and support 'Threatened' and 'At Risk' plant species.
- The Project will result in approximately 0.20–0.23 ha of direct wetland disturbance, in addition to the reclamation of Tarn 3. Mr Rossaak estimates the combined direct loss of wetland and tarn habitat at approximately 0.65 ha. The Applicant has not provided a reconciled assessment of the total extent of habitat loss.
- Tarn 3 is considered by Mr Rossaak to have 'very high' ecological value, rather than the 'high' value attributed by the Applicant. Its ecological significance reflects its unusual fluctuating water levels, groundwater connectivity and associated habitat characteristics. Mr Rossaak also considers that Tarn 3 should be treated as a natural inland wetland.
- The reclamation of Tarn 3 will result in the permanent loss of this feature, including its associated ecological and hydrological values.
- There is uncertainty regarding the potential indirect effects of tracks, service trenches and other infrastructure on wetland hydrology. The Applicant relies on measures such as permeable track sections and trench bulkheads to maintain hydrological connectivity, but their effectiveness in the alpine wetland environment has not been demonstrated.
- The Applicant's assessment identifies residual effects from wetland fragmentation and sedimentation. Potential operational effects associated with snowmaking and grooming on cushion bog and string mire have not been adequately assessed.

<u>Consideration of alternatives and the effects management hierarchy</u>

57. A key concern is whether the Applicant has adequately demonstrated that the loss of Tarn 3 and other freshwater habitats has been avoided or minimised to the extent practicable.

58. In particular, the Applicant has discounted the use of Lake Alta[6] as an alternative source of water without, in ORC's view, a sufficiently robust assessment of the water potentially available within existing consented limits. This includes the extent to which consent conditions constrain abstraction throughout the ski season (including lake level restrictions), and whether the available water could reduce or avoid the need for the proposed Doolans Basin storage reservoir.

59. While ORC accepts that ski area infrastructure has particular functional and operational requirements, the information provided does not yet adequately demonstrate that the location and

[6] The applicant holds current water permit RM11.368.04 to take and use water from Lake Alta for potable supply and snowmaking purposes.

design of all infrastructure affecting wetlands and freshwater habitats is necessary, or that practicable alternatives have been fully evaluated.

60. Mr Rossaak also identifies concerns with the extent to which alternative track alignments, crossing locations and infrastructure configurations have been investigated to avoid or minimise effects on high-value wetlands.

Residual effects and compensation

61. The Applicant proposes to address residual ecological effects through a biodiversity compensation programme. However, Mr Rossaak considers that the proposed compensation has not been demonstrated to be commensurate with the scale and nature of the residual effects. In particular, there is currently insufficient ecological accounting to establish the extent of the losses, the ecological gains expected from the proposed compensation measures, and whether those gains would adequately address the permanent loss of Tarn 3 and other affected wetland habitats.

62. While biodiversity compensation may provide a means of addressing residual effects that cannot otherwise be avoided, remedied, mitigated or offset, the Applicant must still demonstrate that the proposed measures are ecologically appropriate and capable of delivering meaningful ecological benefits. This includes explaining how the proposed compensation relates to the ecological values being lost or affected, why the measures are appropriate in the circumstances, and how they align with recognised good practice. There must also be sufficient certainty regarding the nature, location, implementation and anticipated outcomes of the compensation measures, including how their effectiveness will be monitored and any shortfalls addressed.

63. Accordingly, ORC considers that significant adverse effects on wetland and tarn ecological values are likely based on the information it has been supplied to date. The adequacy of the proposed avoidance, mitigation and compensation measures remains unresolved, and there is insufficient information to establish that the residual effects will be appropriately addressed.

64. These matters are considered further in the assessment of the relevant statutory provisions, including the application of the effects management hierarchy. We encourage the Panel to consider these effects as part of the overall assessment and the Applicant to continue to focus on this area.

Damming of water in the proposed reservoir

65. The proposed development of the tarn will involve the construction of associated structures that will function as a dam to create a water storage reservoir. GeoSolve, on behalf of ORC, has reviewed the preliminary design and assessed the potential geotechnical and dam safety risks, including the consequences of a dam breach. GeoSolve agrees that the proposed reservoir would not constitute a classifiable dam under the Building (Dam Safety) Regulations 2022 and considers that the likelihood of a dam breach would be extremely low, provided the dam is designed and constructed in accordance with relevant industry guidelines. While some aspects of the design remain subject to

further geotechnical investigation and detailed design, GeoSolve considers the concept design to be reasonable and robust, with no significant changes anticipated as a result of further investigations.

66. Overall, GeoSolve considers that sufficient information has been provided to assess the potential effects of the proposal and that any outstanding dam safety matters can be appropriately addressed through detailed design and consent conditions. Recommended conditions include requirements for detailed design by a suitably qualified engineer, construction supervision, certification prior to first filling, and ongoing operation and maintenance. Subject to these conditions, I consider that the potential adverse effects associated with dam safety, including the risk of dam breach, will be appropriately managed.

Effects on streams and riverbeds – Tracks, crossings and intake structures

67. The Project involves the construction of access tracks, stream crossings and associated infrastructure within and adjacent to alpine waterways. The Applicant identifies 11 permanent and one temporary stream crossings, comprising five permanent culverts, one temporary culvert and six splash crossings.

68. ORC's freshwater ecology expert, Dr Michael Greer, has reviewed the potential effects of these works on aquatic life, including the disturbance and permanent loss of stream habitat associated with the proposed culverts and splash crossings.

69. Dr Greer's initial review identified matters requiring further assessment, particularly in relation to the extent of stream habitat affected and the proposed measures to manage those effects. The Applicant has subsequently provided additional information and clarification, which Dr Greer considers has addressed the outstanding matters to the extent necessary and practicable.

70. Dr Greer concludes that the effects of the proposed tracks and crossings on aquatic life are unlikely to be significant. His conclusions are subject to the implementation of the proposed construction controls and the recommended consent conditions.

71. However, ORC's wetland and tarn expert, Mr Rossaak, identifies separate concerns relating to the effects of the works on wetland hydrology and the reclamation of an intermittent stream associated with Tarn 3. In particular:

- Approximately 55 m of intermittent stream with high ecological value will be permanently lost through the proposed reservoir development.
- The Applicant proposes to construct swales around the reservoir, but Mr Rossaak considers these would not replicate the ecological and hydrological characteristics of the natural alpine stream.
- The Applicant has not provided a water balance demonstrating that the reclamation and proposed drainage arrangements will avoid adverse effects on downstream wetlands.
- The Applicant’s consideration of alternative track alignments and crossing locations has not adequately demonstrated that effects on high-value freshwater habitats have been avoided or minimised.

72. Accordingly, while ORC considers that the general aquatic ecological effects of the proposed stream crossings are unlikely to be significant, concerns remain regarding the permanent loss of the intermittent stream associated with Tarn 3 and potential changes to wetland hydrology.

73. We encourage the Panel to consider these effects as part of the overall assessment of residual freshwater habitat loss and the adequacy of the proposed compensation measures.

Effects on water quality – Stormwater and sediment discharges

74. The Project involves substantial earthworks in a steep alpine environment, together with the construction of buildings, tracks, roads and other infrastructure that will generate stormwater runoff. The key potential effects on water quality include sediment discharges during construction and contaminant discharges from developed surfaces during operation.

75. ORC's freshwater ecology expert, Dr Greer, initially identified concerns regarding potential zinc concentrations in stormwater discharges to Doolans Creek. However, following further assessment by the Applicant, Dr Greer considers that these concerns have been resolved to the extent necessary and practicable. In reaching this conclusion, he recognises the relatively small proportion of impervious surfaces within the catchment and that stormwater will predominantly discharge to land before reaching surface water.

76. Dr Greer considers that the updated assessment adequately addresses the aquatic ecological effects of the proposed stormwater discharges and that significant adverse effects are unlikely.

77. He also considers that the draft Construction Environmental Management Plan is fit-for-purpose for managing surface water effects during construction. However, he recommends amendments to the proposed conditions, including:

- Incorporating total suspended solids and turbidity triggers for sediment pond discharges into the consent conditions.
- Strengthening controls on flocculant use to manage the risk of aluminium toxicity.
- Providing for ongoing stormwater quality monitoring throughout the consent term.
- Strengthening the requirements relating to sediment deposition and stream crossing performance.

78. Accordingly, ORC considers that the effects of stormwater and sediment discharges on surface water quality and aquatic ecology are likely to be manageable, subject to appropriate consent conditions.

Effects of wastewater discharges

79. The Project involves upgrading the existing wastewater treatment and disposal infrastructure at Rastus Burn and providing additional servicing for the Doolans Basin expansion. The proposed

upgrades will increase the volume of treated wastewater discharged to land, with the Applicant proposing improved treatment and nutrient removal to manage the associated effects.

80. The Applicant proposes to increase the maximum daily discharge volume from approximately 127 m^3 to 204 m^3. The proposed treatment improvements are intended to maintain nutrient loads at levels comparable to existing operations, notwithstanding the increased wastewater volume.

81. ORC's wastewater treatment expert, Tim Baker (SLR Consulting), reviewed the proposed wastewater treatment and disposal. His initial review identified uncertainties regarding the reliability and representativeness of wastewater quality data, the absence of a final wastewater treatment plant (WWTP) design, and the extent to which the proposed treatment options would achieve the required performance standards. He also noted that the assessment of effects was largely qualitative and that further investigations would be required to inform the final design. The applicant responded to Mr Baker's comments in "Response to ORC re B.11 Wastewater Discharge Impact Assessment, dated 27 August 2026.

82. Following review of the Applicant's additional information, Mr Baker considers that the proposed approach of undertaking further investigations and finalising the WWTP design following consent approval is acceptable, notwithstanding that this is an unusual approach. This is subject to appropriate consent conditions establishing clear treatment performance requirements and ensuring that the final WWTP design is capable of achieving those requirements. Mr Baker has not identified any further concerns with the updated information.

83. ORC's freshwater ecology expert, Dr Greer, has reviewed the potential effects of the proposed wastewater discharges on surface water quality and aquatic ecology. Following the Applicant's response to his initial review, Dr Greer considers that most of the matters previously raised have been resolved or partly resolved. However, uncertainty remains regarding the proposed annual total nitrogen discharge limit of 750 kg and whether this would authorise a greater contaminant load than has historically been discharged.

84. Dr Greer's assessment distinguishes between the effects of the existing wastewater discharge and those that could arise under the proposed consent. In particular:

- The available ecological evidence indicates that the existing wastewater discharge has not resulted in significant adverse effects on aquatic life in the receiving environment. This provides a useful basis for assessing the effects of continued discharge, particularly given the proposed improvements to wastewater treatment.
- However, the Applicant has not adequately demonstrated that the proposed annual nitrogen limit of 750 kg reflects historical discharge loads. Consequently, it is unclear whether the proposed limit would simply provide for the continuation of existing discharge loads or authorise a material increase.
- Dr Greer undertook conservative modelling to investigate the potential effects of wastewater discharges on receiving water quality. This modelling indicates that relevant water quality guideline values could be exceeded under the scenarios assessed, particularly during low-flow conditions when there is less dilution available. Ammoniacal nitrogen

concentrations and the potential for ammonia toxicity to aquatic life are of particular concern.

- Dr Greer acknowledges that the modelling is conservative and is not intended to provide an accurate prediction of future receiving water quality. Nevertheless, the results demonstrate that adverse effects cannot necessarily be discounted solely on the basis of the absence of significant effects from historical discharges, particularly if the proposed consent would enable greater nitrogen loads than have previously occurred.

85. Dr Greer considers that the remaining uncertainty could be addressed by demonstrating that the proposed 750 kg/year nitrogen limit is representative of historical discharges, or by establishing an alternative limit that is supported by the available evidence. Alternatively, consent conditions could be strengthened to ensure that future discharges do not result in effects materially greater than those assessed. Potential measures identified by Dr Greer include a mechanism to review the nitrogen load limit and/or an instream ammoniacal nitrogen limit to provide additional protection for aquatic life. These measures would need to be supported by appropriate monitoring and compliance requirements.

86. Accordingly, ORC considers that the available evidence supports the conclusion that the existing wastewater discharge is not causing significant adverse effects on surface water ecology. However, the potential effects of the proposed discharge at the requested nitrogen limit have not been adequately demonstrated. Further information or appropriate consent conditions are required to resolve this uncertainty.

Overall assessment of environmental effects

87. ORC's technical reviews indicate that a number of the potential adverse effects of the Project have been adequately assessed and are likely to be low or manageable through appropriate consent conditions. These include the hydrological and aquatic ecological effects of the proposed Doolans Creek water take, and the surface water effects associated with stormwater discharges, earthworks and stream crossings. However, there are outstanding concerns as outlined in Table 1.

88. Overall, ORC considers that, while several aspects of the Project are likely to have low or manageable adverse effects, at the moment and based on the information supplied to date, significant residual adverse effects on freshwater habitats are likely, and the adequacy of the proposed effects management and compensation measures has not been demonstrated. ORC is happy to continue to engage on the matters listed in Table 1 and notes the Applicant’s engagement to date on these matters.

89. The implications of these findings for the application of the effects management hierarchy, and the relevant provisions of the Otago Regional Policy Statement and national direction, are considered further in the policy assessment.

SECTION E: POLICY ASSESSMENT

90. In accordance with FTAA Schedule 5 Clause 17(b), the Panel must take into account any relevant provisions of the statutory instruments listed in RMA s104(b).

91. ORC considers that the following statutory instruments are of particular relevance to this Application (and to regional council functions):

a) National Policy Statement for Freshwater Management 2020 (**NPS-FM**)
b) National Policy Statement for Infrastructure 2025 (**NPS-I**)
c) Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (**NES-F**)
d) Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 (**NES-DW**)
e) Resource Management (Measuring and Reporting of Water Takes) Regulations 2010 and Amendment Regulations 2020 (**NES-Metering**)
f) The Otago Regional Policy Statement 2021 (**ORPS 2021**)
g) The Regional Plan: Water for Otago (**RPW**)
h) Kāi Tahu Ki Otago Natural Resource Management Plan 2005 (**NRMP**)

92. The Applicant has provided an assessment of the project against the relevant RMA planning documents. Application Document A.16 sets out the full list of statutory provisions that the Applicant considers to be relevant.

93. ORC agrees that the Applicant has identified all of the statutory documents relevant to this application that were in play at the time the application was lodged.

SECTION E.1 – NPS-FM

94. The National Policy Statement for Freshwater Management 2020 (NPS-FM) provides a framework for managing activities that may adversely affect freshwater, including groundwater, and receiving environments to the extent they are affected by freshwater. The relevant provisions include Policies 1–3, 5–7, 9, 11-13 and 15, together with the requirements of clause 3.22 relating to natural inland wetlands.

95. The Applicant has assessed the proposal against these provisions in section 9.3.8 of the substantive application and concludes that it is generally consistent with the NPS-FM. ORC agrees with that assessment in part, for the reasons outlined below.

96. The Applicant considers that the proposal adopts an integrated approach to freshwater management, provides for the involvement of mana whenua, and incorporates measures to protect freshwater ecosystem health. ORC generally agrees that the assessment has considered the relevant freshwater environments and their interrelationships, and that the proposed design measures and conditions will appropriately manage a number of the identified effects. ORC acknowledges the

Applicant's engagement with Kā Rūnaka and proposed arrangements for ongoing involvement, but defers to mana whenua regarding the adequacy of those arrangements.

97. In relation to the proposed water take, stream crossings, construction activities and stormwater discharges, ORC generally agrees with the Applicant's conclusions. ORC's updated hydrology and freshwater ecology advice indicates that the adverse effects of these activities will be low and can be appropriately managed through the proposed consent conditions, subject to the amendments recommended by ORC's experts. However, further justification is required for the proposed wastewater nitrogen load limit to demonstrate that it will not authorise materially greater effects than those assessed. Subject to resolution of this matter, ORC considers that these aspects of the proposal are generally consistent with the relevant NPS-FM policies, including Policies 5, 9 and 10–13.

98. ORC's principal concerns relate to the loss of Tarn 3 and associated freshwater habitats, and the application of the effects management hierarchy required by the NPS-FM. While ORC agrees that the ski area infrastructure constitutes specified infrastructure, being regionally significant infrastructure identified in the ORPS 2021, and acknowledge the measures incorporated into the design to avoid and minimise effects, ORC does not consider that the Applicant has adequately demonstrated that the loss of Tarn 3 could not practicably be avoided. In particular, the potential use of Lake Alta as an alternative water source has not been sufficiently evaluated, having regard to the existing consented water allocation, the restrictions applying to that consent, and the absence of a robust analysis of the extent to which those restrictions have historically constrained water availability.

99. Further, the Applicant has not yet adequately demonstrated that the proposed aquatic compensation will provide ecological gains that are appropriate and commensurate with the residual loss of freshwater extent and values. This information should be a focus for the Applicant. Addressing this is material to the assessment under Policy 6 and clause 3.22, as well as Policy 7 insofar as the proposal affects intermittent stream habitat associated with Tarn 3, and clause 3.24 in relation to the loss of river extent.

100. ORC also notes that the effects relevant to Policy 6 and clause 3.22 are not limited to Tarn 3. As set out in Section D.4, effects include approximately 0.20 to 0.23 ha of direct disturbance of naturally uncommon wetland types, with the Applicant yet to reconcile the total extent of habitat loss. Further concerns relate to uncertainty about whether permeable track sections and trench bulkheads will maintain wetland hydrology, the unassessed operational effects of snowmaking and grooming on cushion bog and string mire, and the limited investigation of alternative track alignments and crossing location Mr Rossaak also considers that Tarn 3 should be treated as a natural inland wetland. If the Panel accepts that view, the loss of Tarn 3 should also meet the clause 3.22(1)(b) tests, including a functional need for the infrastructure in that location.

101. These matters also have implications for Policy 1. While ORC acknowledges the recreational and economic benefits of the proposal, Policy 15 provides for social, economic and cultural wellbeing in a manner consistent with the NPS-FM. Those benefits do not displace the requirements to appropriately manage adverse effects on freshwater environments.

102. Overall, ORC considers that the proposal is generally consistent with the NPS-FM provisions relating to freshwater allocation, water quality and the management of effects associated with the proposed water take, stream crossings and discharges, subject to the matters identified above. However, ORC does not agree with the Applicant's overall conclusion that consistency with the NPS-FM has been demonstrated. In particular, the assessment of alternatives to the loss of Tarn 3 and the adequacy of the proposed aquatic compensation remain unresolved. Until these matters are satisfactorily addressed, ORC does not consider that the proposal has demonstrated consistency with Policies 1, 6 and 7 or the associated requirements of clause 3.22.

SECTION E.2 – NES-FW

103. The Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-FW) apply to several components of the proposal involving works within or near natural inland wetlands and within riverbeds. The applicant seeks consent under the following regulations:

- Regulation 45(1) – vegetation clearance within, or within a 10 m setback from, a natural inland wetland.
- Regulation 45(2) – earthworks or land disturbance within, or within a 10 m setback from, a natural inland wetland.
- Regulation 45(3) – earthworks outside a 10 m but within a 100 m setback from a natural inland wetland.
- Regulation 45(4) – the taking, use, damming or diversion of water within, or within a 100 m setback from, a natural inland wetland.
- Regulation 45(5) – discharges within, or within a 100 m setback from, a natural inland wetland.
- Regulation 71(1) – the placement, use, alteration, extension or reconstruction of culverts in riverbeds.
- Regulation 73(1) – construction of a weir.

104. The activities identified above require discretionary activity consent under the NES-FW. They include works associated with the proposed reservoir, water supply infrastructure, access roads, stream crossings and discharges.

105. The NES-FW operates alongside the relevant provisions of the Regional Plan: Water for Otago and the NPS-FM. The applicant has assessed the effects of the proposed works on natural inland wetlands and freshwater environments, including the measures proposed to avoid, remedy, mitigate and compensate for adverse effects.

106. As discussed in the assessment of effects and the NPS-FM assessment, ORC generally agree that the construction-related effects of the proposed stream crossings, culverts and associated works can be appropriately managed through the recommended consent conditions. However, I do not consider that the applicant has adequately demonstrated that the effects management hierarchy

has been appropriately applied to the permanent loss of Tarn 3 and other residual freshwater habitat losses. In particular, the adequacy of the assessment of alternatives and the proposed aquatic compensation remain unresolved.

107. These matters are relevant to the Panel's assessment of the proposal under the NES-FW and the associated requirements of the NPS-FM.

SECTION E.3 – NES-DW

108. Regulations 7 and 8 of this NES need to be considered when assessing discharge permits or water permits that have the potential to affect registered drinking water supplies that provide 501 or more people with drinking water for 60 or more calendar days each year.

109. ORC has not identified any such water supplies. Hence, granting of consent would not be precluded by Regulations 7 or 8 if this Project were to be applied for from the ORC under the RMA.

110. Regulations 11 and 12 of this NES require the Consent Authority to place an emergency notification condition on relevant consent holders if it is assessed that the activity could pose a risk to the drinking water supply in the case of an unintended event (e.g. a spill or other accident). Regulation 11 states that Regulation 12 applies to activities with the potential to affect registered drinking water supplies that supply 25 or more people with drinking water for 60 or more days of a calendar year. ORC has not identified any such water supplies.

SECTION E.5 – NES-Metering

111. These regulations apply to holders of water permits which allow freshwater to be taken at a rate of 5 litres/second or more. Permit holders are required to, in a manner specified by the regulations, measure their water use at a specific location, verify their water measuring device, keep records, and provide records to Council. The 2020 amendments to the regulations introduced measuring and reporting requirements, to be implemented in a staged fashion starting with larger water takes through to progressively smaller water takes, down to 5 L/s.

112. The minimum requirements in the regulations apply directly to the holders of qualifying water permits, and override any less stringent consent conditions, from the date that the regulations first apply to the consent. While these regulations do not require Council to impose specific conditions on a qualifying water permit, Council is required to enforce the regulations.

113. To ensure that the Consent Holder is clear about their water metering and reporting obligations, consent conditions that reflect the minimum requirements of these regulations are routinely applied to resource consents. The Applicant has already proposed conditions that are generally consistent with these regulations. ORC has suggested minor modifications.

114. For the avoidance of doubt, even if these conditions are not applied to the relevant water permits, the Applicant would still be required to comply with these regulations.

SECTION E.6 – ORPS 2021

Otago Regional Policy Statement 2021

115. The Applicant has assessed the proposal against the relevant provisions of the ORPS 2021 in section 9.3.11 of the substantive application. The ORPS 2021 became operative on 9 July 2026. The Applicant's assessment uses the proposed RPS provision numbering; these comments use the operative numbering. The provisions of particular relevance to ORC's functions concern regionally significant infrastructure (EIT-INF-O1, EIT-INF-P3 and EIT-INF-P4), integrated management (IM-P4 to IM-P6), freshwater prioritisation (LF-WAI-P1), natural inland wetlands and rivers (LF-FW-P11 and LF-FW-P14), water allocation and use, discharges (LF-FW-P16 and LF-FW-P17), land and soil management (LF-LS-P21), indigenous biodiversity (ECO-P1 and ECO-P4 to ECO-P8) and natural hazards (HAZ-NH).

116. The Applicant concludes that the proposal generally aligns with the relevant objectives and policies, acknowledging some tensions arising from the functional and operational requirements of ski area infrastructure in a sensitive alpine environment. ORC agrees with this assessment in part, for the reasons outlined below.

Regionally significant infrastructure

117. The Applicant identifies the Remarkables Ski Area as regionally significant infrastructure. The ORPS 2021 definition of regionally significant infrastructure includes "ski area infrastructure at Remarkables". ORC agrees that the proposal is consistent with the enabling direction of EIT-INF-O1 and EIT-INF-P3, given the additional recreational capacity and supporting infrastructure it will provide.

118. EIT-INF-P4 sets the effects management hierarchy for the location of infrastructure. Its first priority is to avoid locating infrastructure in significant natural areas, outstanding natural features and landscapes, natural inland wetlands and rivers, outstanding water bodies, significant historic heritage and wāhi tūpuna (EIT-INF-P4(1)). The proposal locates infrastructure in several of these areas, including natural inland wetlands, Tarn 3 and the beds of Doolans Creek and its tributaries. For regionally significant infrastructure, EIT-INF-P4(2)(a) applies where avoiding those areas is not reasonably practicable because of a functional or operational need. Residual effects are then managed under LF-FW-P11 and LF-FW-P14 in wetlands and rivers, and under ECO-P4 to ECO-P6 in significant natural areas.

119. ORC accepts that ski area infrastructure has a functional need to locate in an alpine environment. That does not establish a functional or operational need for each component to occupy the particular location proposed, and the Applicant has shown this only in general terms. In particular, it has not demonstrated that the loss of Tarn 3 is necessary, having regard to the potential use of water from Lake Alta. Nor has it demonstrated that alternative track alignments, crossing locations and infrastructure layouts were investigated to avoid high-value wetlands. The management steps that EIT-INF-P4(2)(a) then requires have also not been completed, because the effects management hierarchy has not been worked through and no ecological accounting has been

provided for the proposed compensation. ORC therefore considers that consistency with EIT-INF-P4 has not yet been demonstrated in relation to the freshwater habitats affected by the proposal. The Applicant should focus on addressing this as part of their ongoing engagement.

Integrated management

120. ORC generally agrees with the Applicant that the proposal has been informed by an integrated assessment of freshwater, ecological, infrastructure and natural hazard matters, consistent with IM-P4 and IM-P5. However, IM-P6 requires uncertainty to be addressed using the best available information, with a precautionary approach where effects are potentially significant. The alternatives to the loss of Tarn 3 remain unresolved and the freshwater compensation outcomes have not been demonstrated.

Fresh water

121. In relation to the proposed Doolans Creek water take, stream crossings, stormwater discharges and construction-related effects, ORC generally agrees with the Applicant's assessment. ORC's updated hydrology and freshwater ecology advice indicates that the effects of these activities will be low and unlikely to be significant. In particular, the revised residual flow of 33.5 litres per second is supported by ORC's experts, the proposed stormwater discharges are not expected to result in significant adverse effects on receiving water quality, and the Construction Environmental Management Plan is considered fit for purpose, subject to additional sediment discharge triggers and controls on flocculant use. With the recommended conditions, ORC considers that these aspects of the proposal are consistent with the relevant RPS provisions concerning water allocation and use, river management, stormwater discharges and erosion and sediment control, including LF-FW-P14, LF-FW-P16 and LF-LS-P21.

122. In relation to wastewater discharges, ORC agrees with the Applicant that the proposed treatment upgrades and continued discharge to land are consistent with the direction of LF-FW-P17. The available ecological evidence indicates that the existing discharge is not causing significant adverse effects. However, the Applicant has not yet adequately demonstrated that the proposed total nitrogen load limit of 750 kilograms per year reflects historical discharges. This matters because the effects assessment relies on the existing discharge as the basis for predicting future effects. ORC considers that the wastewater proposal is capable of being consistent with LF-FW-P17, provided the nitrogen load limit is appropriately justified or amended and the recommended monitoring and compliance conditions are adopted.

123. ORC's principal concerns relate to the permanent loss of Tarn 3 and associated freshwater habitats. The wider wetland effects are also relevant, including approximately 0.20 to 0.23 ha of direct disturbance of naturally uncommon wetland types, the unreconciled total extent of habitat loss, and uncertain indirect effects on wetland hydrology. While ORC acknowledges the avoidance and minimisation measures incorporated into the proposal, ORC considers that the Applicant has not yet demonstrated that the effects management hierarchy has been appropriately applied. In particular, the assessment has not yet adequately established that the loss of Tarn 3 could not practicably be avoided, or that the proposed aquatic compensation will provide ecological gains

appropriate and commensurate with the residual loss of freshwater extent and values. For the reasons discussed in the NPS-FM assessment, ORC does not consider that consistency with LF-FW-P11 or LF-FW-P14 has been demonstrated in relation to these losses.

124. These matters are also relevant to LF-WAI-P1, which prioritises the health and wellbeing of freshwater ecosystems. Although the proposal incorporates measures to manage effects on freshwater quality, flow regimes and ecosystem health, the permanent loss of Tarn 3 without adequately demonstrating that the effects management hierarchy has been satisfied means that consistency with LF-WAI-P1 has not been demonstrated.

Ecosystems and indigenous biodiversity

125. The ECO provisions apply to all indigenous biodiversity (ECO-P1). The Applicant and ORC's wetland ecology reviewer agree that the affected environment supports significant indigenous biodiversity, including naturally uncommon wetland ecosystems and Threatened and At Risk plant species. ORC's comments on the ECO provisions are limited to the freshwater habitats affected by the approvals within its jurisdiction, being the natural inland wetlands, Tarn 3 and the associated streams.

126. The Applicant relies on ECO-P5(1). That policy applies only where the activity is specified infrastructure that provides significant national or regional public benefit, has a functional or operational need to locate within the significant natural area, and has no practicable alternative locations. ORC accepts that the ski area infrastructure is specified infrastructure and that the Project is likely to provide regional benefits. However, for the reasons given under EIT-INF-P4, the functional or operational need to locate the reservoir on Tarn 3, and the absence of a practicable alternative, have not yet been demonstrated. ECO-P5 and ECO-P7 also require the effects management hierarchy to be applied in sequence, so that indigenous biodiversity is maintained and at least no net loss is achieved. That has not yet been shown, because the proposed compensation is not supported by ecological accounting. The proposed restoration and revegetation are consistent with ECO-P8, but do not replace the need to complete the hierarchy. ORC therefore considers that alignment with ECO-P4 to ECO-P7 has not yet been demonstrated for the freshwater habitats affected by the proposal.

Overall

127. Overall, ORC considers that the proposal is generally consistent with the RPS provisions enabling regionally significant infrastructure and those relating to water allocation, stormwater discharges, construction-related sediment management and the effects of stream crossings, subject to the points raised above. However, ORC does not agree with the Applicant's overall conclusion that it has demonstrated consistency with the ORPS 2021. The principal outstanding matters concern EIT-INF-P4, LF-WAI-P1, LF-FW-P11, LF-FW-P14 and ECO-P4 to ECO-P7, particularly the adequacy of the assessment of alternatives to the loss of Tarn 3 and other high-value wetlands, and of the proposed compensation for residual freshwater habitat losses. The proposed wastewater nitrogen load limit also requires resolution, although ORC considers that this matter can be appropriately addressed through further justification or amendments to the consent conditions.

SECTION E.7 – RPW

128. The Regional Plan: Water for Otago (RPW) is a first-generation plan that predates and does not fully give effect to the relevant higher-order planning instruments, particularly the NPS-FM and Otago Regional Policy Statement 2021. Accordingly, ORC considers that less weight should be afforded to the RPW where its provisions do not reflect the more recent higher-order policy direction. Nonetheless, the relevant provisions remain applicable to the assessment of the proposal.

129. The Applicant has assessed the proposal against the relevant objectives and policies of the RPW in section 9.3.13 of the substantive application. These include provisions relating to the natural and human use values of lakes and rivers (Chapter 5), water quantity (Chapter 6), water quality and discharges (Chapter 7), the beds and margins of lakes and rivers (Chapter 8), and wetlands (Chapter 10). The Applicant concludes that the proposal is consistent with these provisions. ORC agrees with that assessment in part, for the reasons outlined below.

130. In relation to the proposed Doolans Creek water take, ORC agrees with the Applicant's assessment against the relevant Chapter 6 provisions, including Objectives 6.3.1–6.3.4 and Policies 6.4.0, 6.4.0A, 6.4.0C and 6.4.7. ORC's hydrology expert considers that the proposed allocation is reasonable for the intended purpose and that the revised residual flow of 33.5 litres per second will appropriately protect stream hydrology and natural character. ORC's freshwater ecology expert also considers that the take is unlikely to result in significant adverse effects on aquatic life. Subject to the recommended abstraction limits and monitoring conditions, ORC considers that the proposed water take is consistent with the relevant objectives and policies.

131. ORC also generally agrees with the Applicant's assessment in relation to the proposed stream crossings, intake works, earthworks and stormwater discharges. ORC's updated freshwater ecology advice indicates that the effects of these activities will not be significant and can be appropriately managed through the proposed construction methodologies, rehabilitation measures and recommended consent conditions. ORC therefore consider that these aspects of the proposal are generally consistent with the relevant provisions of Chapters 5, 7 and 8 concerning the maintenance of freshwater values, protection of receiving water quality, and management of works within the beds and margins of water bodies.

132. In relation to wastewater discharges, ORC agrees that the proposed treatment upgrades and continued discharge to land are consistent with the general policy direction of Chapter 7, particularly Policies 7.C.2, 7.C.6 and 7.C.12. The available ecological evidence also indicates that the existing discharge is not causing significant adverse effects. However, the proposed total nitrogen load limit of 750 kilograms per year has not been adequately demonstrated to reflect historical discharges, which is important given that the assessment of future effects relies on the existing discharge as its baseline. ORC considers that the wastewater proposal is capable of being consistent with the relevant water quality provisions, provided the nitrogen load limit is appropriately justified or amended and suitable monitoring and consent conditions are adopted.

133. ORC's principal concerns relate to the proposed reclamation of Tarn 3 and the permanent loss of associated freshwater habitats. The Applicant considers that these effects will be appropriately addressed through the proposed compensation arrangements, including funding for a boardwalk at Lake Alta. However, ORC does not consider that the proposed boardwalk provides a demonstrated ecological benefit commensurate with the loss of the natural tarn and further information is needed on this. Further, the Applicant has not yet adequately established that the loss of Tarn 3 could not practicably be avoided, or that the proposed compensation will appropriately address the residual loss of freshwater extent and values. These matters are relevant to the Chapter 5 and Chapter 8 provisions concerning the maintenance of freshwater values and protection of natural character.

134. Similarly, while the proposed construction measures and conditions provide an appropriate basis for managing effects on wetland hydrology and connectivity, ORC considers that the applicant has not yet demonstrated that the individual and collective values of the affected wetlands will be maintained. In particular, the permanent loss of Tarn 3 and other residual wetland losses have not yet been adequately addressed through the effects management hierarchy or the proposed compensation arrangements. ORC therefore does not consider that consistency with the relevant Chapter 10 objectives and policies, including Objectives 10.3.1 and 10.3.2, has been demonstrated to date.

135. Overall, ORC considers that the proposed water take, stream crossings, earthworks and stormwater discharges are generally consistent with the relevant RPW objectives and policies, subject to the recommended conditions. The proposed wastewater upgrades are also consistent with the general policy direction, although the nitrogen load limit requires further consideration. However, ORC does not agree with the applicant's overall conclusion that the proposal is consistent with the RPW and further work by the Applicant is needed. In particular, consistency has not yet been demonstrated in relation to the permanent loss of Tarn 3 and other residual freshwater habitat losses, having regard to the relevant provisions of Chapters 5, 8 and 10.

SECTION E.8 – Kāi Tahu Ki Otago Natural Resource Management Plan 2005 (NRMP)

136. As noted elsewhere in these comments, the application does not contain any assessment of the potential adverse effects on Kāi Tahu values, beliefs, or enduring relationship with whenua and wai māori.

137. ORC advises the Panel of a relevant iwi management plan, being the Kāi Tahu Ki Otago Natural Resource Management Plan 2005.

138. Provisions that ORC considers are likely to be of particular relevance to the Panel's consideration of cultural impacts, include:

a) 5.2 Overall Objectives
b) 5.3.3 Wai Māori General Objectives
c) 5.4.3 Wāhi Tapu Objectives
d) 5.4.4 Wāhi Tapu General Policies

e) 5.5.3 Mahika Kai and Biodiversity Objectives
f) 5.5.4 Mahika Kai and Biodiversity General Policies
g) 5.6.3 Cultural Landscapes Objectives
h) 5.6.4 Cultural Landscapes General Policies

139. This NRMP can be used to provide cultural context and guidance as to the natural resource values, concerns, and issues of Kāi Tahu.

SECTION F: MANAGEMENT PLANS

140. Management plans are routinely used to ensure that outcomes prescribed in consent conditions are complied with. They can be a suitable mechanism to provide for a degree of flexibility in the way in which a particular adverse effect may be managed to achieve an outcome required by a consent condition. This is particularly helpful for projects that will be implemented in stages or over long timeframes, as they can provide for a flexible response to circumstances that may develop over the duration of the consent.

141. It is standard practice for ORC to impose consent conditions requiring preparation of management plans, and for ORC to receive and certify (or re-certify) those plans, drawing on in-house or consultant specialist expertise as needed.

142. ORC considers that management plans are likely to be an appropriate, and necessary, means to ensure that adverse effects of this proposal are managed. Management plans should be limited to non-critical operational processes that sit behind a performance or operational standard.

143. The application includes a suite of management plans to manage the effects of the proposal.

SECTION G: CONSENT CONDITIONS

144. Section 83 requires that conditions be no more onerous than necessary to address the reason for which it is set in accordance with the provision of this Act that confers the discretion.

145. Appendix 6 contains a number of comments from ORC on the Applicant's proposed conditions of consent. These comments are preliminary feedback in relation to a limited number of matters on which ORC considers it has sufficient information to suggest appropriate changes. These have generally been discussed throughout these comments.

146. ORC considers that ongoing informal workshops with the Applicant will likely resolve any other outstanding matters related to formatting, workability and enforceability of conditions, which have not typically been raised in this report.

147. Should informal workshops with the Applicant and other interested parties not go ahead as anticipated, ORC considers that it is well placed to contribute meaningfully to the development of an appropriate suite of consent conditions for this project and advises that it will make itself and its expert advisors available for any workshopping, conferencing, hearing, or similar process that may be directed by the Panel on this matter.

SECTION H: OTHER MATTERS

148. FTAA Schedule 5 Clause 17 part (b) directs a Panel to take into account any provisions of parts 2, 3, 6, 8, 9, and 10 of the RMA that direct decision-making on a resource consent application. This includes consideration of any other matter the consent authority considers relevant and reasonably necessary to determine the application as provided for in RMA s104(1)(c).

149. To assist the Panel, Council provides an assessment of the following other matters that it considers relevant to the determination of this application:

- Otago Regional Council Strategic Directions

SECTION H.1 – OTAGO REGIONAL COUNCIL STRATEGIC DIRECTIONS 2024-2034

150. The ORC Strategic Directions 2024-2034 include the following focus areas:

a) Partnership: Otago Regional Council has effective and meaningful partnerships with mana whenua, creating better outcomes for our region.
b) Communities: Otago has cohesive and engaged communities that are connected to the environment and each other.
c) Environment: Otago has a healthy environment ki uta ki tai (from mountains to the sea), including thriving ecosystems and communities, as well as flourishing biodiversity.
d) Resilience: Otago builds resilience in a way that contributes to community and environmental wellbeing through planned and well-managed responses to shocks and stresses, including natural hazards.
e) Climate: Otago is a climate-resilient region that plans for and invests in initiatives that reduce emissions and help us adapt to our changing climate.
f) Transport: Otago has an integrated transport system that contributes to the accessibility and connectivity of our community, reduces congestion and supports community wellbeing aspirations.

SECTION I: OTHER LEGISLATION THAT DIRECTS DECISION MAKING

151. Schedule 5 clause 17 states that:

For the purposes of section 81, when considering a consent application, including conditions in accordance with clauses 18 and 19, the Panel must take into account, giving the greatest weight to paragraph (a),—

(a) the purpose of this Act; and
(b) the provisions of Parts 2, 3, 6, and 8 to 10 of the Resource Management Act 1991 that direct decision making on an application for a resource consent (but excluding section 104D of that Act); and
(c) the relevant provisions of any other legislation that directs decision making under the Resource Management Act 1991.Council has considered the relevant sections of the RMA, and subsidiary statutory documents, which direct decision making, and makes the following observations:

152. To assist the Panel, ORC provides an assessment against the relevant provisions of the RMA that direct decision making.

I.1 – RMA S87A(6) – PROHIBITED ACTIVITIES

153. The application does not seek approval for any activity that would be prohibited.

I.2 – RMA S105 – MATTERS RELEVANT TO CERTAIN APPLICATIONS

154. The matters traversed by this section are adequately discussed throughout the application and supporting documents.

I.3 – RMA S106A – CONSENT AUTHORITY MAY REFUSE LAND USE CONSENT IN CERTAIN CIRCUMSTANCES

155. Earthworks outside wetland setback areas do not require authorisation from ORC. Accordingly, ORC has not assessed the risks associated with natural hazards as part of these comments, as these are matters for CODC to consider.

I.4 – RMA S107 – RESTRICTION ON GRANT OF CERTAIN DISCHARGE PERMITS

156. The application includes discharges of contaminants to land in circumstances where contaminants may enter water, including treated wastewater, stormwater and construction-related sediment discharges. Section 107(1) of the RMA restricts the granting of discharge permits where, after reasonable mixing, the discharge is likely to give rise to any of the effects specified in paragraphs (c)–(g), including significant adverse effects on aquatic life.

157. Having regard to ORC's updated technical advice, it is considered that the proposed stormwater and construction-related discharges are unlikely to result in any of the effects specified in section 107(1)(c)–(g), provided the recommended consent conditions are imposed.

158. In relation to wastewater, the available freshwater ecology evidence indicates that the existing discharge is not causing significant adverse effects on aquatic life, and the proposed treatment

upgrades are expected to improve discharge quality. However, the proposed total nitrogen load limit of 750 kg/year has not been adequately demonstrated to reflect historical discharges, which form the basis of the assessment of future effects.

159. Accordingly, while the available evidence does not indicate that significant adverse effects on aquatic life are likely, further justification or amendment of the nitrogen load limit is required to establish that the consent will not authorise materially greater effects than those assessed. Subject to resolution of this matter and the recommended monitoring and compliance conditions, I consider that the proposed discharges are unlikely to give rise to the effects specified in section 107(1)(c)–(g).

I.5 – RMA S123 – DURATION OF CONSENT

160. Section 123 of the RMA applies to a decision of the Panel on the consent.[7]

161. The Applicant seeks a duration of 35 years for all authorisations, with a lapse period of 10 years.

162. ORC notes that s127B of the RMA limits the term of any new water permit to take and use water to six-years.[8] This is discussed in Section I.6 below.

I.6 – RMA S127B – DURATION OF WATER PERMIT IN OTAGO

163. In relation to the proposed Doolans Creek water take, ORC's hydrology and freshwater ecology experts consider that the adverse effects of the take will be low and are unlikely to be significant, subject to the revised residual flow of 33.5 litres per second and the recommended consent conditions. The proposed allocation is considered reasonable for the intended purpose, and the residual flow and abstraction limits will appropriately protect stream hydrology and aquatic values. On this basis, ORC has not identified any significant adverse effects associated with the proposed water take that would, in themselves, warrant a shorter consent duration. However, the water take is intended to service the proposed ski area expansion, and its duration should also be considered in the context of the overall proposal and the associated consent conditions.

164. Despite these important factors, if ORC were the decision maker under the RMA, this permit would not be granted for longer than six years in accordance with s127B of the RMA. Nevertheless, for this application under the FTAA, ORC considers that the Panel could form the view that a longer duration is appropriate, for the following reasons:

a) The FTAA modifies the decision-making provisions applicable to a resource consent application;

[7] FTAA Schedule 5, Clause 17, part (7).
[8] With the exception of any water permit which replaces a deemed permit associated with hydro-electricity generation infrastructure listed in Schedule 10A.5.1 of the plan on the terms specified in Rule 10A.3.1B of the plan, subject to conditions.

b) Under clause 17(1) of schedule 5, among other things the Panel must 'take into account' certain provisions in the RMA 'that direct decision making on an application for a resource consent'. That includes Part 6 of the RMA, which is where s127B is located;
c) Separately, clause 17(7) provides that section 123 of the RMA "[applies] to a decision of the Panel on the consent." There is no equivalent provision that means that s127B 'applies to' a Panel; and
d) In the absence of a requirement to 'apply' s127B, the Panel must still 'take it into account', albeit giving the greatest weight to the purpose of the FTAA.

165. The Homestead Bay Expert Panel has previously determined that a consent duration exceeding the six-year period specified in s127B of the RMA can be granted under the FTAA. The application of s127B is also relevant to other applications currently being considered under the FTAA, including the Bendigo–Ophir Gold Project and Macraes Phase Four (MP4).

I.7 – NES-FW REGULATION 45

NES-F Regulation 45 – Construction of specified infrastructure: Discretionary Activities (Natural Inland Wetlands) may be relevant. Based on the information currently available to Council, resource consents sought under clauses (1)-(5) of Regulation 45 could not be granted in relation to Tarn 3 if this decision were being made under the RMA. This is because Regulation 45 clause (6)(c) has not been met.

SECTION J: WHEN AN APPROVAL MUST OR MAY BE DECLINED

166. FTAA section 85 sets out when a Panel must or may decline an approval.

J.1 When approval must be declined

167. The panel must decline an approval if one or more of the matters listed under section 85(1) of the FTAA applies. ORC is not aware of any matters listed under section 85(1) being applicable to the application.

J.2 When approval may be declined

168. S85(3) provides that a Panel may decline an approval if it forms the view that there are one or more adverse impacts in relation to the approval sought and those adverse impacts are sufficiently significant to be out of proportion to the project's regional or national benefits that the Panel has considered under section 81(4), even after taking into account any conditions the Panel may impose or that the Applicant may agree to in order to avoid, remedy, mitigate, offset, or compensate for those adverse impacts.

169. The s85(3) test requires the weighting of incommensurables, being in this case adverse environmental effects and positive economic effects. ORC has not attempted to undertake such a weighting exercise, as to do so would require an understanding of any adverse or positive effects

associated with the other approvals sought by this application, and those assessments are conducted by Queenstown Lakes District Council, CODC and DoC.

SECTION K: CONCLUSIONS

170. Council considers that the application:

- Meets the purpose of the Act, in that it is a development project with significant regional benefits; and

- There are remaining issues that need to be addressed, as set out in Table 2 below:

Table 2: Summary of key issues identified by ORC

Key issue	**Risk**
Loss of Tarn 3 and the associated intermittent stream (reservoir footprint)	Permanent loss of a very high value alpine freshwater feature. The Applicant has not adequately demonstrated that the loss can be avoided to the extent reasonably practicable, including by using water from Lake Alta under its existing water permit. Consistency with the National Policy Statement for Freshwater Management (NPS-FM) Policies 6 and 7 and clause 3.22, and National Environmental Standard for Freshwater (NES-F) regulation 45, has not been demonstrated. This should be considered by the Applicant and Panel.
Direct and indirect effects on natural inland wetlands	Approximately 0.20 to 0.23 ha of direct disturbance of naturally uncommon wetland types that support 'Threatened' and 'At Risk' plants. Total habitat loss (approximately 0.65 ha of Tarn 3) has not been clearly addressed by the Applicant. The effectiveness of proposed mitigations (including permeable track sections and trench bulkheads) has not been demonstrated. The operational effects of snowmaking and grooming on cushion bog and string mire have not been assessed by the Applicant. This should be considered by the Applicant and Panel.
Alternatives for tracks, crossings and infrastructure layout	The Applicant has not demonstrated that effects on high-value wetlands have been avoided or minimised to the extent practicable.

Biodiversity compensation	The Applicant has no ecological 'accounting' to show that gains will be commensurate with the residual losses. The proposed Lake Alta boardwalk does not provide a demonstrated ecological gain. This should be considered by the Applicant and Panel.
Wastewater discharge: 750 kg/year total nitrogen limit	The limit proposed does not reflect historical discharges. Conservative modelling indicates possible guideline exceedances at low flow, including ammonia toxicity.

APPENDICES

- Appendix 1: Technical Expert Report: Andrew Rossaak - Wetlands
- Appendix 2: Technical Expert Report: Michael Greer – Freshwater ecology and water quality
- Appendix 3: Technical Expert Report: Charlotte Lockyer - Hydrology
- Appendix 4: Technical expert memorandum: Tim Baker - Wastewater Treatment System
- Appendix 5: Technical comment memo: Dam safety
- Appendix 6: Preliminary comments on conditions

Appendix 6 – Preliminary comments on draft resource consent conditions

The following tables consolidate ORC's preliminary feedback on the Applicant's proposed conditions. The comments are intended to assist further discussions and refinement of the conditions, rather than represent a comprehensive condition-by-condition review.

Table 1: Biodiversity compensation

Condition / matter	ORC's preliminary comments
General – ecological appropriateness	ORC considers that the Applicant should provide a clearer explanation of how the proposed compensatory actions relate to the ecological values being lost or affected, why those actions are appropriate and how they align with recognised ecological good practice.
General – certainty of delivery	ORC recommends that the conditions provide sufficient certainty regarding the location, timing, implementation, intended outcomes, monitoring and reporting requirements for the proposed compensation measures. Consideration should also be given to interim performance milestones, the point at which outcomes are expected to become self-sustaining, corrective actions and alternative compensation measures where intended outcomes are not achieved.
General – land, approvals and funding	ORC considers that the Applicant should clarify how any necessary land access, regulatory approvals, funding and governance arrangements will be secured. Fundamental decisions regarding the nature, location and adequacy of compensation should be resolved before consent is granted, rather than deferred to subsequent management plans or approval processes.
BIO.1 and BIO.7	ORC recommends reconsidering the proposed timeframes for establishing the Biodiversity Compensation Project and preparing the associated plan. In particular, consideration should be given to confirming the wetland and tarn compensation measures before construction activities affecting those values commence.
BIO.2	ORC recommends that the objectives more clearly identify measurable ecological outcomes for affected wetland and tarn values, with appropriate consideration of whether the anticipated gains are commensurate with the residual losses.
BIO.4	ORC considers that further information is needed to demonstrate how the proposed compensation funding has been determined and whether it is sufficient to deliver the intended ecological outcomes, taking into account uncertainty and time lags.
BIO.8 and BIO.9	ORC recommends that it be included among the parties involved in reviewing the freshwater and wetland components of the Biodiversity Compensation Project Plan and receive the relevant documentation.

BIO.10	ORC recommends that the plan identify specific measures intended to address wetland and tarn losses, including their location, performance measures and long-term protection. General biodiversity enhancement activities, such as predator control and revegetation, should not be assumed to adequately compensate for these losses without an appropriate ecological justification.
BIO.15	ORC has concerns that the proposed $20,000 contribution towards a boardwalk near Lake Alta has not been demonstrated to provide ecological compensation for the loss of Tarn 3. Further consideration should be given to the ecological rationale for this measure and whether it would deliver measurable benefits relevant to the affected values.

Table 2: Water takes, hydrology and instream structures

Condition / matter	ORC's preliminary comments
Doolans Creek water take	ORC's hydrology expert supports the revised minimum residual flow of 33.5 L/s and has not identified any additional conditions beyond those already proposed for monitoring abstraction rates and volumes, maintaining residual flows and continuously monitoring stream water levels.
WAT.14	ORC recommends clarifying whether cumulative abstraction volumes are directly measured and reported at 15-minute intervals or calculated from instantaneous flow measurements. Direct measurement of cumulative volumes is preferred.
WAT.19	ORC recommends that detailed stream crossing designs be submitted for certification against clearly specified criteria, supported by an independent technical review addressing stream and associated wetland hydrology.
WAT.20	ORC recommends that the detailed design requirements for Culvert B expressly address maintenance of wetland hydrology, in addition to stream hydrology.
WAT.21	ORC recommends that the assessment of wetland seepage and any necessary hydrological connectivity measures for Culvert B be subject to ORC certification.
WAT.22	ORC recommends that any alternative location for Splash Crossing B be subject to ORC certification rather than approval solely by the Applicant's technical experts.
WAT.24	ORC recommends expressly identifying ORC as the certifying authority for the detailed design of Armoured Swale D.
WAT.25	ORC recommends requiring pre-construction delineation of the transition between riparian wetland and stream channel at Armoured Swale A.
WAT.28	ORC's freshwater ecology expert considers that confirmation of whether stream crossing structures have been constructed as designed and are functioning appropriately should be

	undertaken by a suitably qualified engineer, rather than solely by an ecologist.
WAT.33	ORC's freshwater ecology expert considers that the proposed sediment deposition monitoring would be difficult to implement reliably, particularly given the challenges of attributing a 10% increase in sediment deposition to the activity. Consideration should be given to a narrative performance standard addressing sediment deposition attributable to the activity, supported by appropriate inspection and response requirements.
WAT.34	ORC recommends consideration of sediment and wet-weather stormwater monitoring at five-year intervals throughout the consent term, with additional investigation and remediation where necessary. The proposed macroinvertebrate monitoring is considered of limited value for this purpose, particularly in the absence of a specified methodology.

Table 3: Earthworks, erosion and sediment control

Condition / matter	**ORC's preliminary comments**
General – sediment discharges	ORC's freshwater ecology expert recommends including TSS and/or turbidity triggers for discharges from sediment retention ponds to surface water as consent conditions, rather than relying solely on the triggers currently included in Table 7 of the draft Construction and Environmental Management Plan.
ESC.9 and ESC.10	ORC recommends further consideration of controls on flocculant use to manage the risk of aluminium toxicity. This could be addressed through discharge standards, receiving environment standards or requirements for the Chemical Treatment Plan to demonstrate that aluminium concentrations will remain below levels likely to cause toxicity.
EW.5	ORC recommends including a requirement to notify ORC within two working days where significant water is encountered during earthworks and further assessment or mitigation is required to maintain hydrological connectivity.
EW.6	ORC recommends consideration of additional requirements for trenching within wetlands, including precast bulkheads upstream and downstream of trenches and backfill material no more permeable than the surrounding material.

Table 4: Wetland and tarn conditions

Condition / matter	**ORC's preliminary comments**
Interpretation – Terrestrial Ecology Management Plan	ORC recommends expressly including tarns within the definition, given the disputed wetland status of Tarn 3.
GC.8	ORC recommends extending certification requirements to the freshwater and wetland components of the Biodiversity Compensation Project Plan.
ECO.2(f)(iii)	ORC recommends that the Terrestrial Ecology Management Plan include measurable performance

	indicators for each affected wetland type, including baseline information and triggers relating to water levels, wetland extent and wetland vegetation.
ECO.4	ORC recommends considering a minimum monitoring and reporting duration extending into operation, recognising that sediment and snow management effects may recur throughout the operational life of the activity.
ECO.6	ORC recommends establishing a maximum authorised area of wetland loss, differentiated by wetland type and reconciled with the Applicant's ecological assessment. The reported areas of approximately 0.20 ha and 0.289 ha require reconciliation. Changes to the disturbance footprint affecting wetlands should also be reported to ORC.
ECO.8(d)	ORC recommends requiring wetland boundaries to be delineated in accordance with the Ministry for the Environment's Wetland Delineation Protocols by a suitably experienced person, with the results reconciled against the maximum authorised wetland loss.
ECO.9	ORC recommends including ORC as a recipient of ecological survey reports relating to wetlands, including wetland delineation results.
ECO.31	ORC recommends that detailed wetland crossing designs be submitted for ORC certification against clearly specified criteria, supported by independent hydrological and wetland ecology review. Consideration should also be given to requiring precast bulkheads to avoid potential alkalinity effects associated with cast-in-place concrete in acidic peat environments.
ECO.32	ORC recommends replacing "in general accordance with" with "in accordance with" the certified designs.
ECO.33	ORC recommends that post-construction inspections be undertaken by both a suitably qualified hydrologist and ecologist, with a further inspection approximately one year after construction to assess whether hydrological functioning has been maintained.
ECO.34	ORC recommends considering a requirement that temporary diversions associated with wetland crossings do not lower wetland water levels beyond the immediate work area.
ECO.35	ORC recommends strengthening the wetland monitoring programme to include at least one season of baseline monitoring, piezometers at representative wetland crossings, appropriate reference sites, quantified performance triggers and monitoring of potentially affected wetlands within 100 m downgradient of works. The monitoring should provide a means of testing the Applicant's assumption that no indirect wetland loss will occur. Consideration should also be given to how any

	additional loss attributable to altered hydrology would be addressed.
ECO.36	ORC recommends correcting the incomplete wording in clause (a), including the phrase “in circumstances”.
ECO.37	ORC recommends correcting the cross-reference and specifying indigenous wetland species for revegetation performance requirements within wetland areas.
ECO.40	ORC recommends that erosion and sediment controls associated with permeable access roads be maintained throughout the operational life of the relevant tracks. Consideration should also be given to a measurable sediment deposition trigger for receiving wetlands.
ECO.41	ORC recommends including a requirement to notify ORC within two working days of any exception to the requirement to complete and reinstate disturbed wetland sections within the same working day.
ECO.42	ORC recommends that the requirement to maintain wetland crossings to an appropriate engineering standard expressly include maintenance of wetland hydrological functioning.
New – wetland plant translocation	Where wetland plant translocation is proposed, ORC recommends that suitable receiving sites be identified and assessed before wetland clearance, with appropriate survival targets and monitoring requirements.
INF.5	ORC recommends further consideration of the detailed reservoir design requirements, including a pre- and post-development water balance for Tarn 3 and its catchment, identification and monitoring of potentially affected downgradient wetlands and terminal soakage areas, and measures to manage the potential transfer of didymo through the Doolans Creek water supply connection.
BD.5(4)	ORC recommends extending the restrictions on locating infrastructure within wetlands to temporary tower access, snow guns and pump buildings, and expressly including cushion bog habitats.
New – damming of water in the Tarn	ORC recommends conditions that include requirements for detailed design by a suitably qualified engineer, construction supervision, certification prior to first filling, and ongoing operation and maintenance.