Fast-track

Te Kāwanatanga o Aotearoa
New Zealand Government

Your Comment on the Ōparure Quarry South-Western Pit: Substantive Application.

Please include all the contact details listed below with your comments and indicate whether you can receive further communications from us by email at substantive@fastrack.govt.nz

1. Contact Details			
Please ensure that you have authority to comment on the application on behalf of those named on this form.			
Organisation name (if relevant)	Department of Conservation		
First name	Elizabeth		
Last name	Williams		
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2. We will email you draft conditions of consent for your comment			
X	I can receive emails and my email address is correct	☐	I cannot receive emails and my postal address is correct

3. Please provide your comments on this application
Please find comments attached



Linda Kirk
Fast Track Applications Manager

Acting pursuant to delegated authority on behalf of the Director-General of Conservation.

Date: 10 November 2026

Note: A copy of the Instrument of Delegation may be inspected at the Director-General's office at Conservation House Whare Kaupapa Atawhai, 18/32 Manners Street, Wellington 6011

Comments on a fast-track consenting application

Fast-track Approvals Act 2024 section 53

To: The Expert Panel

From: Department of Conservation

Regarding fast-track project: Ōparure Quarry South-Western Pit

Fast track Reference: FTAA-2606-1251

1 Overview

1.1 Graymont (NZ) Limited ("the Applicant") is applying for resource consents to enable the development, operation and progressive rehabilitation of the new Southwest (SW) Pit at Graymont's existing Ōparure Quarry. The quarry is located at 806 Ōparure Road, just north of Te Kuiti.

1.2 Quarrying at the SW Pit, as at the existing limestone Ōparure pit, will be opencast. The area to be disturbed over the lifetime of the SW Pit would be 59.6 hectares by approximately 2080. Only small sections would be quarried at a time in stages and then rehabilitated. The extension will utilise the existing access road, office facilities, material storage facilities and water sources currently operating at the quarry.

1.3 The Applicant seeks approvals under the Resource Management Act 1991 (RMA) only.

1.4 A Wildlife Act Authority (Ref:118705-FAU) was granted on 9 June 2025. This covers 'Phase 1' of the project which includes part of the SW Pit and a proposed new haul road (total area approximately 26 hectares in area). A further Wildlife Authority would be required for the next phases of the quarry operation (i.e. approximately after 10 years).

1.5 The application does not take place on any Public Conservation Land.

1.6 The Department of Conservation (the Department) provided advice to the Applicant at the pre application stage in January 2026.

1.7 In accordance with section 53(2)(m)(i) of the Act, the Director-General of Conservation (D-G) has been invited to comment on the substantive application. Statutory delegations are in place for the Department of Conservation (DOC / the Department) to provide commentary on behalf of the D-G.

2 Department of Conservation advice

2.1 The Department's assessment has been confined to the actual and potential ecological effects of the proposal and the proposed consent conditions that will manage ecology effects and minimise harm to fauna. Accordingly, DOC has not commented on its consistency with the wider statutory framework.

2.2 Technical advice to inform this report was provided by Moira Pryde (Technical Advisor – Ecology) on bat ecology and Dr Catherine Beard (Senior Science Advisor – Ecology) on terrestrial ecosystems. The credentials of these advisors are provided in **Appendix A**.

3 Assessment

3.1 Terrestrial Ecology

Karst Ecosystem values and assessment

3.2 Blue Green Ecology[1] have provided a terrestrial and subsurface ecology assessment. This considers not only vegetation and fauna within the application site, but also includes an assessment of karst ecosystems, cave habitats, subterranean fauna and broader ecological processes.

3.3 The application identifies[2] that the project will result in direct and permanent loss of:

- approximately 1.0 ha of high value, significant karst ecosystem features;
- approximately 1.4 ha of native vegetation/habitat;
- 7 short, small cave systems and entrances; and
- Habitat and food sources for native fauna.

3.4 Karst ecosystems are classified as *naturally uncommon*[3] in New Zealand and support distinctive geological, hydrological and ecological characteristics. The proposed extension to the quarry will result in the permanent loss or modification of several karst features, including cave entrances, sinkholes, calcareous cliffs, scarps and tors which are classified as critically endangered and vulnerable ecosystem types respectively[4]. It is generally agreed that the affected karst features are of moderate ecological value, reflecting both historical disturbance associated with land-use change and the broad representation of comparable karst habitats within the ecological district. Nonetheless, these ecosystems remain naturally uncommon and irreplaceable components of the landscape. Once removed by quarrying, the affected cave entrances, sinkholes and associated karst formations cannot be recreated through

[1] Substantive Application, Appendix K, Blue Green Ecology, Dr Vaughan Keesing dated 9 July 2026
[2] Substantive Application Report, Enspire Consulting Limited, page viii
[3] Holdaway et al (2012). Status assessment of New Zealand's naturally uncommon ecosystems. Conservation Biology, 26(4).
[4] Holdaway et al (2012). Status assessment of New Zealand's naturally uncommon ecosystems. Conservation Biology, 26(4).

restoration. This is a relevant consideration when assessing the significance of permanent habitat loss.

3.5 There is also uncertainty associated with the subterranean ecosystems. Although dye tracing and hydrological investigations indicate that the project area is connected to the wider karst system, the ecological role of the affected features within that system is not fully understood. Surveys undertaken were limited to accessible cave passages, which represent only a portion of the available subterranean habitat. Research suggests that mesocavern habitats, which consist of networks of small voids and fissures that are generally inaccessible to direct survey, may provide important habitat for obligate cave-dwelling fauna. Karst systems also contain extensive networks of smaller voids and fissures that cannot be surveyed directly. As a result, the absence of records of significant cave fauna should be interpreted with some caution, and the ecological effects of removing part of the karst system cannot be determined with complete certainty.

3.6 The proposed additional mapping of the Camelot Cave system is likely to improve understanding of the extent and connectivity of the local cave network but is unlikely to eliminate the uncertainty associated with inaccessible subterranean habitats.

3.7 Where there is such uncertainty, national direction[5] ordinarily requires that decision makers adopt a precautionary approach.

Proposed effects management

3.8 It is noted in the application that in response to further studies and engagement, the Applicant decided to reduce the footprint of the Western Pit. This avoids the northern catchment which feeds into the Upper Mangawhitikau catchment. Further, the Applicant proposes to compensate for the loss of indigenous terrestrial, karst and aquatic habitat through the adoption of management plans, proposed conditions and a proposed 'Ecological Betterment Plan' (EBP). The EBP includes a proposal for indigenous revegetation, fencing, pest control, habitat enhancement, cave protection measures, and actions intended to improve habitat connectivity.

3.9 While the Department supports the proposed enhancement measures, they do not address the same ecological values as those associated with the karst landforms, cave habitat or ecological functions that would be lost if the proposal were to be approved. The biodiversity gains achieved through the EBP should therefore be considered alongside, rather than as compensation for, the loss of karst ecosystem values. This approach is consistent with the principles for biodiversity offsetting and compensation[6] which recognise that offsets and compensation are not appropriate where indigenous biodiversity values are irreplaceable or vulnerable, or where the effects of a proposal are uncertain or unknown.

[5] National Policy Statement for Indigenous Biodiversity (NPSIB), Clause 3.7
[6] National Policy Statement for Indigenous Biodiversity (NPSIB), Appendix 3 and 4

3.10 In regard to the proposed restoration planting set out in the Karst and Riparian Management Plan[7], the Department supports the intention to use eco-sourced material from within the Otorohanga and Waitomo Ecological Districts. This aligns with restoration best practice guidance and helps to maintain local species diversity and ecological integrity of restored areas. The proposed plant species are generally appropriate for the area and habitat types however the Department recommends one minor amendment:

- *Sophora tetrapterea* – a kōwhai species is included in the proposed planting list for the northern riparian area (Appendix U7, Table 1). While commonly planted beyond its natural range, its use is not considered appropriate in this instance, particularly given the risk of hybridisation with *Sophora microphylla*, which is proposed elsewhere within the restoration planting programme.

3.11 Overall, the Department generally agrees with the assessment of ecological values and effects for terrestrial ecology. While the gains do not replace the specific karst features that would be lost, they are relevant when considering the overall ecological outcome of the proposal. The implementation of the EBP is considered to result in a positive outcome, subject to robust conditions being imposed to ensure effective implementation and adequate monitoring of outcomes.

3.12 Long-tailed bats

Values and assessment

3.13 The Terrestrial and Subsurface ecology assessment[8] identifies that field surveys undertaken confirmed the presence of long-tailed bats (*Chalinolobus tuberculatus*) along with potential roosting trees within the application site. Long-tailed bats have a conservation status of 'Nationally Critical' which is the highest threat category before extinction. The project site is considered to have high ecological value given their presence.

3.14 The Ecology Assessment identifies actual and potential effects of the proposal including:

- Habitat[9] loss and displacement, for long-tailed bats this includes alteration to commuting routes, loss of foraging and roosting habitat as a result of permanent loss of karst ecosystem features, caves and native vegetation;
- Fragmentation as a result of the loss of native vegetation/habitat; and

[7] Substantive Application, Appendix U7, PDP Ltd, dated July 2026
[8] Substantive Application, Appendix K, Blue Green Ecology, Dr Vaughan Keesing dated 9 July 2026, page 3, 5, 32
[9] NPSIB, Clause 1.6 Interpretation: ***habitat*** *means the area or environment where an organism or ecological community lives or occurs naturally for some or all of its life cycle, or as part of its seasonal feeding or breeding pattern; but does not include built structures or an area or environment where an organism is present only fleetingly.*

- Potential indirect effects due to the operation of the quarry including lighting and noise on the remaining habitats nearby the boundaries of the proposed new pit.

3.15 As discussed above, the loss of the karst ecosystem needs to be considered carefully in terms of the loss of fauna habitat. Bats are known to use caves within this karst landscape, an example being Grand Canyon Cave near Piopio which is an important social area for long-tailed bats. Waitomo and Ruakuri Caves have also been used by bats in the past and similar limestone areas are found in South Canterbury whereby bats make use of this landscape as winter roosting areas. Based on this, it is recommended that a precautionary approach is applied, given that the caves within the SW Pit may offer bats access and roosting potential. Although bats were not detected around the cave entrances at the time of the surveys (during November), the karst features could offer bat roosting sites in other seasons when surveys were not undertaken.

Proposed effects management

3.16 To address these direct and potential adverse effects on bats, the applicant proposes:

- Vegetation retention where possible
- Restoration planting linked to the existing SNA and the riparian areas to strengthen connectivity for bat habitat
- Predator control and plant pest control
- Fencing to protect riparian areas from stock
- Proposed bat reserve at or near to the quarry site and roosting habitat enhancement
- Adoption of the bat roost protocols
- Adoption of best practice to minimise effects of artificial lighting on bats using downward facing directional lighting with a maximum correlated colour temperature of 2700K.

3.17 The Department supports the proposed planting, fencing, and enhancement of the identified SNAs. These measures are considered necessary to offset the permanent loss of bat habitat. While the Bat Tree Removal Protocol will be implemented as part of the Bat Management Plan, the protocol is intended to minimise the risk of bat mortality and does not address the effects associated with habitat loss.

3.18 Bat management and enhancement areas should be considered on a landscape scale. It is not clear in the information provided whether the ‘bat reserve’ and proposed artificial bat roosts will connect with the protected areas for both the vegetation and predator control to maximise the positive effects. Restoration planting will not replace natural bat roost trees in the short to medium term. To mitigate this, artificial bat roosts are proposed. These provide temporary housing for bats if they choose to use them, however they are not considered a long-term solution. There has been some uptake of artificial roosts in the Hamilton area, but the success of these boxes as maternity roosts and for the survival of young is unclear.

Outcome monitoring should be implemented to address this. It is recommended that the Bat Management Plan and proposed restoration planting for the Bat Reserve also considers the New Zealand Bat Recovery Group Advice Note on 'Planting to provide roosts for bats in the long-term[10]' (November 2025).

3.19 The Department supports the proposal to undertake pest control. This will need to include monitoring of pest species to determine the success of the programme. Ideally, pest control areas should be as large as possible and connected rather than isolated patches.

3.20 The Applicant's terrestrial ecology report[11] recommends conditions to manage artificial lighting and reduce the effects on bats. This does not appear to have been considered as part of the Bat Management Plan or proposed conditions to address adverse effects on bats and their habitat. There is also no inclusion of the bat mitigation proposed within the Ecological Betterment Plan i.e. identification of the proposed 'bat reserves'. This is a gap in the application, given that only part of the proposed mitigation package is required in the conditions of consent. Where an assessment relies on measures described in management plans, those measures need to be secured through conditions to ensure that they are implemented and monitored over the duration of the consent.

3.21 Herpetofauna

Assessment and Mitigation Package

3.22 The application includes a herpetofauna assessment for the whole of the proposal within the Terrestrial and Subsurface Ecology report (Appendix K) and a Lizard Management Plan[12] and Wildlife Act Authority that apply to 'Phase 1' of the project. Phase 1 encompasses approximately 26 hectares of the application site and includes part of the western pit and the construction of the haul road. It is understood that this phase will be undertaken over the first 10 years of the project. The application seeks a consent duration of 35 years which, if granted, would extend beyond Phase 1. It is anticipated that any development proposed beyond the Phase 1 will require a further Lizard Management Plan and Wildlife Authority to address the effects of activities outside the approved Phase 1 boundary. To ensure adverse effects on lizards are appropriately managed for the entire site, it is recommended that the resource consent conditions contain a trigger to require a further assessment and lizard management plan before development proceeds beyond Phase 1. It is also noted that a further Wildlife Authority will be required. This does not form part of this application but would need to be applied for through a 'business as usual' process.

[10] https://www.doc.govt.nz/globalassets/documents/conservation/native-animals/bats/bat-recovery/advice-planting-bat-roosts.pdf oosts.pdf
[11] Substantive Application, Appendix K, Section 9.0 Effects Management Hierarchy, page 40
[12] Substantive Application, Appendix U12, Lizard Expert NZ, dated November 2024

3.23 The Management Plan identifies two species of indigenous lizards within the site being the copper skink (not threatened) and the ornate skink (At Risk-declining). The Lizard Management Plan considers that approximately 2% (0.52ha) of the Phase 1 footprint provides shared habitat for copper skink and ornate skink. Although Ornate skinks are assumed to be present over the Phase 1 footprint, these are at very low densities. The lizard assessment provided identifies potential adverse effects on lizards and their habitat as a result of the proposal including; injury/death, displacement/disturbance of populations, permanent loss of habitat, and fragmentation of populations.

3.24 The proposed mitigation for lizards relies on salvage and translocation. Further, in addition to the Ecological Betterment Plan and improvements proposed to the lizard release site, the applicant also proposes the following mitigation:

- Mice control over the 0.5 ha release area and a 20m buffer surrounding it into the wider rehabilitated link area for a period of 3 years;
- Linking the SNA enhancement areas with the rehabilitation areas; and
- Providing lizard habitat within the rehabilitated area with rock and logs under the guidance of the project herpetologist, to provide quality and enduring skink habitat to receive salvaged lizards.

3.25 The Department supports the mitigation proposed to manage effects on lizards but as noted above, the measures currently proposed relate only to Phase 1 of the quarry extension. While Phase 1 lizard salvage and translocation will be authorised and managed under the Wildlife Act authority, the application does not adequately address the effects of habitat loss or habitat rehabilitation beyond Phase 1. As resource consent is sought for the entire quarry extension area, the effects on lizards associated with all future stages of quarry development should also be appropriately managed. This is particularly relevant given that the lizard surveys undertaken recorded lizards across the wider site[13]. This matter should be addressed by the Applicant.

3.26 There is also uncertainty as to whether the proposed rehabilitation areas and pest control specific to lizards (as outlined above) will be coordinated, carried out and monitored in line with the overall mitigation package proposed for the activity.

4 Comments on conditions

4.1 As DOC's concerns mainly relate to ecological effects, these comments focus on the ecology conditions. There may be a broader set of amendments required. If the Panel is minded

[13] Substantive Application, Appendix K, Terrestrial and Subsurface Ecology, Section 3.5 and Appendix U12 Lizard Management Plan

towards granting consent, DOC understands there will be an opportunity to comment on the proposed final condition set under section 70 of the Act.

4.2 The Department has reviewed Section 8 of the Substantive Application Report which includes recommendations for conditions based on expert assessment and Appendix T1 (Waikato Regional Council (WRC)) and T2 (Waitomo District Council (WDC)) proposed draft conditions.

Management Plans

4.3 Given that the assessment of effects relies on the successful implementation of the proposed management plans, it is essential that these plans are appropriately secured through consent conditions. This provides certainty regarding the outcomes to be achieved and ensures that the proposed mitigation and monitoring measures are legally enforceable.

4.4 The management plans should provide the administrative and technical detail necessary to demonstrate how the objectives and performance standards set out in the consent conditions will be achieved.

4.5 The Department supports the inclusion of draft management plans within the application, as they assist in assessing the proposed management measures for avoiding, remedying, or mitigating effects on At-Risk and Threatened species and terrestrial ecology.

4.6 However, while some plans are incorporated through proposed conditions, including those relating to the Camelot Cave Buffer Zone, Pit Closure Rehabilitation, and Betterment Plan (including site management, riparian planting and pest management) (Conditions 35-37, 75 (WRC) and 24-25 (WDC)), the proposed conditions do not adequately incorporate the management plans and recommendations relating to bats, avifauna, herpetofauna, planting and pest control programmes specific to these species, or monitoring required to assess whether the intended ecological outcomes are achieved.

4.7 The *Panel Convener's Practice and Procedure Guidance Note*[14] states at section 21 that applicants are strongly encouraged to use condition mechanisms that provide greater certainty. While the Applicant has incorporated some of these mechanisms, the Department seeks the following additional amendments:

- Inclusion of performance or environmental standards that specify the standard that must not be breached.
- Provision of trigger responses for resource use to occur provided specified environmental conditions exist.
- Monitoring of triggers and responses, including adaptive management responses; and
- Clear certification process and where appropriate, ensuring that input from suitably qualified experts is incorporated.

[14] https://www.fasttrack.govt.nz/__data/assets/pdf_file/0022/8680/Panel-conveners-practice-and-procedure-guidance.pdf (July, 2025), page 21

4.8 The Department considers that the proposed conditions can be improved to ensure that the objectives of the various management plans are clearly incorporated, implemented, and capable of achieving the intended ecological outcomes.

Certification

4.9 Proposed Conditions 22 (WRC) and 19 (WDC) set out the certification process. Clause e of these draft conditions provides for 'deemed' certification. The Department does not support 'deemed certification' conditions and does not consider it necessary for this fast-track consent.

4.10 The Environment Court has expressed concern about the validity of "deemed certification" conditions that allow a consent holder to go ahead with implementing a management plan where the council had a certification role but failed to respond within the specified time period: *Re New Zealand Transport Agency – Waka Kotahi [2024] NZEnvC 133.* The Court stated, at [126], that it saw no reason to depart from its findings in *Meridian Energy Ltd v Wellington City Council* [2011] NZEnvC 232:

> *"It is essential that there is no uncertainty about the approved proposal and what the consent conditions require, including the details to be approved as part of the certification process in the future. The conditions referred to the process for approval of management plans which were intended to provide environmental protections. Meridian sought that if it did not hear back from the Council as to approval of a management plan within a specified time period then the management plan was deemed to be approved. This approach is not sound environmental management (or we suspect good project management), and we do not accept Meridian's approach*."

4.11 The requirement for management plans in conditions is there for the protection of the environment and management of effects. An independent, regulatory check of the management plans are necessary to ensure that the Applicant is adhering to all protective requirements before work commences. Deemed certification removes the primary protection mechanism and degrades the overall purpose of the management plans.

Herpetofauna

4.12 Proposed WRC conditions 27-24 provide for the 'SW Pit & Haul Site Management Plan'. To achieve the objective set out in Condition 28, the Plan must include, amongst other matters, the Ecological Betterment Plan and Karst Riparian Management Plan. These plans set out the protection and enhancement proposed. Although these draft plans refer to the lizard management plan and the specific 'vegetated link' and rehabilitation area for lizards, it is not set out as a requirement in the proposed conditions.

4.13 To monitor the success of mitigation outcomes for lizards arising from permanent habitat loss, it is recommended that a condition require implementation of the approved Lizard Management Plan for Phase 1 and that the creation and establishment of lizard habitat be

overseen by a suitably qualified herpetologist. Conditions specific for monitoring of planting and pest control outcomes should also link to the programmes set out over the longer term for lizards.

4.14 Further, as discussed above, the effects of lizard habitat loss and disturbance associated with the proposed full quarry extension remain matters for consideration under the resource consent process and, at present, have only been considered for Phase 1. One option to address this matter would be to require the preparation of a further Lizard Management Plan, certified by Council, to address the effects of quarrying beyond Phase 1. Such a condition could require that, prior to quarrying commencing beyond Phase 1 (or year X as per the stage plans):

- updated lizard surveys are undertaken by a suitably qualified herpetologist or ecologist;
- the effects of the proposed next stages of quarrying on lizards and lizard habitat are assessed; and
- a Lizard Management Plan is prepared and submitted for Council certification based on the findings of those surveys and assessment.

4.15 The purpose of this approach would be to ensure that the effects of additional habitat loss associated with the remaining quarry footprint are appropriately addressed and managed. Any recommendations arising from the updated Lizard Management Plan should be reflected, where relevant, in the Ecological Betterment Plan, the Karst and Riparian Management Plan, and the Rehabilitation Plan applying to later stages of the quarry operation.

4.16 An advice note is recommended to record that a further Wildlife Act Authority may be required prior to quarrying progressing beyond Phase 1. Any future salvage, handling, disturbance, or translocation of lizards would need to be authorised under the Wildlife Act independently of any approval granted under this Fast Track process.

Long Tailed Bats

4.17 As noted above, the Applicant has provided an assessment on Long Tailed Bats and a draft Bat Management Plan (BMP). The recommendations to manage the effects on bats and its habitat have not been included in the proposed consent conditions. This is the primary mechanism proposed to avoid, remedy and mitigate effects on bats and their habitat as a result of the proposed quarry expansion. The Bat Management Plan objective should be expanded to cover all elements that are proposed to be addressed to avoid, remedy and mitigate effects on bats and their habitat. This includes not only adherence to the Bat Roost Protocols but also the proposed enhancement of bat habitat through revegetation, artificial bat roosts and associated monitoring. The conditions should also include the mitigation

specified in the application relating to lighting to minimise adverse effects on bats such as downward facing lights and a colour temperature of 2700K[15].

4.18 The Department recommends that the management plan condition include the opportunity for DOC to provide comment on the draft bat management plan and that this feedback is provided to Council as part of the certification process.

4.19 As noted above, maintenance requirements for the bat roost boxes and monitoring requirements for the BMP and pest management programme need to be specified in the conditions of consent.

4.20 A Wildlife Authority has not been applied for in relation to effects on bats and it is therefore recommended that an advice note is included as follows: *Advice Note - Wildlife Act 1953: The Consent Holder is required to ensure they comply with their responsibilities under the Wildlife Act 1953 to not disturb, harm, kill etc any protected wildlife. If approvals are required under the Wildlife Act 1953, the Consent Holder should ensure that the methodologies adopted under this condition do not conflict with any requirements of that Act*.

4.21 As noted above, the proposed bat enhancement areas should be clearly identified on the Ecological Betterment Plan and secured through consent conditions to ensure that these areas are protected. The legal protection of the proposed enhancement areas, not only for bats but also for other identified fauna and flora, should be addressed in the conditions to ensure these values are protected in perpetuity. This is consistent with the Applicant's stated intention that the proposed SNAs (enhancement areas) and area in between[16] and the Guildford cave entrance will be protected through a covenant mechanism (e.g. a QEII covenant). There are currently no conditions that provide certainty that such legal protection will be implemented. Conditions should therefore be included to secure the long-term protection of these areas and the ecological values they are intended to support.

SW Pit & Haul Road Site Management Plan

4.22 It is recommended that the site management plan include procedures and protocols for managing Threatened and At-Risk species in case they are discovered onsite during the commencement and operation of the quarry. This is relevant for not only bats but lizards and avifauna. Further, the Bird Management Plan and Pest Management Plan should be included as plans to be certified under the Site Management Plan which includes mitigation to be undertaken to achieve the objective set out in Condition 28 (WRC).

[15] Substantive Application, Terrestrial Ecological Report, Appendix K, Section 9, page 40
[16] Substantive Application Report, Section 4.2 and Figure 7

5 Summary/Conclusions

5.1 Overall, the Department considers that whilst there is a permanent loss of karst habitat associated with the proposal, the implementation of the EBP is considered to result in positive outcomes provided that conditions ensure the implementation and monitoring of the betterment proposal.

5.2 The Department's remaining concerns can be resolved by strengthening existing conditions and through new conditions to ensure there are clear objectives, standards and outcomes required to be achieved, with detailed mechanisms for implementation of those conditions provided in management plans to manage the actual and potential adverse effects on terrestrial ecology.

5.3 The Department is prepared to provide further commentary on draft conditions.

5.4 Thank you for the opportunity to comment.

6 Appendix A: Technical Expert Credentials

These comments are based on advice from the following technical experts at the Department of Conservation.

Senior Science Advisor (Flora and Ecosystems) – Dr. Catherine Beard

Qualification and Experience

1. *My role at DOC is Senior Science Advisor – Ecology in the Flora and Ecosystems Team within the Terrestrial Biodiversity Unit of the Biodiversity, Heritage and Visitors Group, based in Kirikiriroa/Hamilton. I hold a BSc and PhD in Biological Sciences from the University of Waikato and have approximately 40 years' work experience in the natural sciences, which provides the scientific foundation for my expertise in New Zealand flora and functional ecosystem ecology.*
2. *I have held my current role with DOC since 2014. My work focuses primarily on New Zealand flora, plant ecology, and functional ecology of terrestrial (including some wetland) ecosystems. I provide specialist scientific advice to support conservation management, ecological assessment, and evidence-based decision making. My responsibilities include interpreting, assessing, and synthesising complex ecological information; advising on the management of plant species, communities, and ecosystems; and contributing to the scientific basis of conservation practice and policy. I also have responsibilities for ensuring scientific integrity, methodological robustness, and quality assurance of ecological evidence, and for supporting multidisciplinary teams on matters requiring technical judgement.*
3. *Prior to joining DOC, I worked for seven years as a Wetland Ecologist at Waikato Regional Council, where I undertook ecological assessments, monitoring, restoration planning, and technical reporting to support regional environmental management. Earlier in my career, I also held the position of Technical Officer in Biological Sciences at the University of Waikato, where I provided specialist support for plant ecology and flora research and teaching, also serving as Herbarium Curator with responsibility for specimen collections, taxonomic accuracy and research support, and as a contract lecturer teaching undergraduate and graduate courses in biological sciences.*
4. *I have extensive experience preparing and reviewing scientific evidence that informs policy, regulatory, and operational decision-making. My professional background includes authorship and review of scientific and technical reports and papers, participation in advisory and expert working groups, contribution to the development of scientific standards and guidance, and presentation at professional conferences and workshops.*

Technical Advisor (Fauna-Bats) – Moira Pryde

1. *I am a Technical Advisor in the Fauna Advice Team with the Department of Conservation (DOC). I hold a Post-Graduate Diploma in Wildlife Management in Ecology from Otago University, Dunedin (2001) and a Resource Studies degree from Lincoln University, Christchurch (1996). I have been employed by the Department of Conservation (DOC) since 1997.*
2. *I have considerable experience relevant to assessing this application including 20 years continuous experience of working with bats in New Zealand. I have extensive direct experience of radio-tracking; studying movements, survival of bats and finding roosts in native forests and fragmented habitats for example Eglinton (Fiordland), Grand Canyon (Waikato), Hanging Rock in South Canterbury.*
3. *My work has involved active research and management of threatened species as well as an advisory role where I comment as a bat expert on DOC permissions and Resource Management Act matters as well as giving advice to DOC operations staff and externals on monitoring birds and bats. I have given specialist advice on bats for multiple projects. I have worked on managing and improving bat data management and run the national bat distribution database.*
4. *The Eglinton Valley is a long-term study site in southern Fiordland that has been running since 1993. Various management methods have been applied involving predator control by trapping, bait stations and aerial 1080 operations. Outcome monitoring looks at endemic species abundance and survival. I analyse long-tailed bat data to identify survival and population changes. I was also involved in the Canterbury (Hanging Rock) and Waikato (Grand Canyon) projects where we compared bat survival with the Eglinton data.*
5. *I belong to the Natural Heritage Group for Bats that advise on bat research in New Zealand. I have been assessed as an E band trainer by the Department of Conservation Bat Recovery Group which means I am highly competent to catch, handle and mark bats as well as undertake survey and monitoring. This qualification also allows me to train others. I run the National Database for the distribution of bats in New Zealand.*
6. *My current research involves comparing bat acoustic recorder data with mark-recapture studies to develop a low-cost monitoring technique for bats.*
7. *I have published 11 peer reviewed scientific papers 5 of which are on bats. I have produced management reports and best practice documents for bats in New Zealand. I am a member of the NZ Bat Recovery Group and Australasian Bat Society.*