Comments on a project under the Fast-track Approvals Act 2024

Project name	Waihi North

All sections of this form with an asterisk (*) must be completed.

Contact Details			
Please ensure that you have authority to comment on the application on behalf of those named on this form.			
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Please provide your comments on this application
If you need more space, please attach additional pages. Please include your name, page numbers and the project name on the additional pages.

Note: All comments will be made available to the public and the applicant when the Ministry for the Environment proactively releases advice provided to the Minister for the Environment.

Comments on a fast-track consenting application

Fast-track Approvals Act 2024 Section 53

To: The Expert Panel

From: Director-General of Conservation

Regarding fast-track project: Waihi North [FTA-2504-1046]

Table of Contents

Executive summary

The Department of Conservation (DOC), on behalf of the Director-General of Conservation, provides these comments under sections 53(2)(k) and 53(2)(m)(i) of the Fast-track Approvals Act 2024 in relation to the Waihi North Project (the Project) proposed by OceanaGold (New Zealand) Ltd (OGNZL). The Project includes the Wharekirauponga Underground Mine (WUG), proposed to be located beneath the Coromandel Forest Park and with associated surface activities across multiple areas both within and outside the Coromandel Forest Park.

The Project area contains significant conservation values, particularly within the Coromandel Forest Park, including critical habitat for two species of native frogs—Archey's frog and Hochstetter's frog—both classified as "At Risk – Declining," with Archey's frog also listed as "Critically Endangered" internationally. The Project poses uncertain but potentially significant adverse effects on these species, particularly from underground blasting vibrations, dewatering, and vegetation clearance. DOC considers OGNZL's assessment of these effects to be overly optimistic and recommends a precautionary approach.

DOC acknowledges that OGNZL has proposed a suite of mitigation, offsetting and compensation measures, including pest control, habitat enhancement and research funding. However, DOC has concerns about the scale, feasibility and effectiveness of these measures. In particular, DOC disputes the assumption that frog populations will triple as a result of pest control, on the grounds of limited evidence and overly optimistic modelling assumptions.

DOC also identifies risks to other indigenous fauna, threatened flora, freshwater ecosystems, wetlands, and heritage and recreational values. The proposed stream diversions and wetland impacts raise concerns about ecological functionality and adequacy of offsetting. DOC notes inconsistencies in the application's data and a lack of clarity in how ecological gains will be secured in perpetuity.

DOC has engaged with OGNZL through technical and conditions workshops and acknowledges progress made. However, several key issues remain unresolved, particularly in relation to the robustness of management plans, enforceability of consent conditions, and adequacy of monitoring and adaptive management frameworks.

DOC concludes that without significant improvements to mitigation measures, clearer performance standards and stronger legal protections for offset areas, the Project risks causing irreversible harm to high-value conservation areas and species. DOC recommends that the Panel adopt a precautionary approach and ensure that any approvals are subject to stringent, enforceable conditions.

1. Introduction

1. On 2 May 2025, the Environmental Protection Authority (EPA) determined that the OceanaGold (New Zealand) Ltd (OGNZL) substantive application (the application) for the Waihi North Project (the Project) was complete and complied with the requirements of section 46(2) of the Fast-track Approvals Act 2024 (FTAA/the Act).

2. The application seeks a suite of approvals under the FTAA that would otherwise be applied for under the Wildlife Act 1953, Conservation Act 1987, Crown Minerals Act 1991 and Freshwater Fisheries Regulations 1983 (jointly, the conservation approvals) as well as a suite of resource consents that would otherwise be applied for under the Resource Management Act 1991 (the resource consents).

3. A key component of the Project is the proposed Wharekirauponga Underground Mine (WUG), located beneath Coromandel Forest Park (Area 1) and accessed via a tunnel from OGNZL-owned farmland on Willows Road. Although the mine is underground, associated activities will take place above ground within the Coromandel Forest Park. The above ground activities include up to four vent shafts, 20 investigation and exploration drill sites, 50 portable drill rig sites, a range of monitoring activities, minimum impact activities and prospecting activities (per the Crown Minerals Act 1991), campsites, helipads, tracks and pest management activities.

4. Outside the Coromandel Forest Park, within the “Waihi Area” (Areas 2 – 7), the Project includes the Gladstone Open Pit (GOP) being a new open pit mine, Northern Rock Stack (NRS) being a waste rock stockpile, and Tailings Storage Facility 3 (TSF3) being a facility to store mining tailings. A new Surface Facilities Area (Willows SFA) will also be established at the Willows Road Farm to support WUG operations, including a temporary waste rock stockpile, the Willows Rock Stack (WRS). Rehabilitation planting and pest management activities are proposed both within and outside the Coromandel Forest Park.

5. On 28 July 2025, the Expert Panel (the Panel) directed the EPA to invite the Director-General of Conservation (the D-G) to comment on the substantive application, as required by sections 53(2)(k) and 53(2)(m)(i) of the Act.

2. Purpose of the section 53 comments

6. The Department of Conservation (DOC) has prepared comments (the DOC comments) on behalf of the D-G.

7. The D-G has a range of functions which are relevant to the application. The Conservation Act 1987 sets out functions which include (amongst other things) management of land and natural and historic resources for conservation purposes, preservation so far as is practicable of all

indigenous freshwater fisheries, protection of recreational freshwater fisheries and freshwater fish habitats, and advocacy for the conservation of natural resources and historic heritage.[1]

8. The D-G has been invited to comment on the application on the following basis:

- Pursuant to section 53(2)(k) as a "relevant administering agency". The D-G is administering agency for the conservation approvals.
- Pursuant to section 53(2)(m)(i). The application involves a suite of resource consents. Clause 13 of Schedule 5 lists the D-G as one of the persons or groups who must be invited to comment where an application is made for a resource consent/s.

9. The D-G has already provided a series of reports under section 51 of the Act in relation to the conservation approvals. The primary purpose of the DOC comments is to outline the D-G's position on the application for resource consents, with the intention of assisting the Panel in its consideration of the application as it relates to those approvals. That said, OGNZL has developed and presented the application on a 'project-wide' basis meaning that many aspects of the application and supporting analyses and reports apply across multiple approvals. In addition, many of the resource consents sought relate to activities and/or areas that also require conservation approvals. This means a number of issues that are relevant to the resource consents have already been addressed in DOC's section 51 reports, in particular DOC's assessment of potential effects on conservation values and the effectiveness of mitigation measures to address those effects. Where that is the case, the DOC comments cross-reference the relevant parts of the section 51 reports.

10. DOC has sought input from a range of technical experts. These experts, their credentials and an indication of the topics to which they have contributed are listed in Appendix B of the Covering Report provided with the Director-General's section 51 reports.

11. The Covering Report also describes the engagement DOC has undertaken with OGNZL in relation to the Project,[2] and the engagement DOC has undertaken with iwi in relation to the application.[3] These aspects of the Covering Report apply equally to the DOC comments.

3. Conservation values

12. The area to which the Project relates has a wide range of conservation values. As noted above, a key component of the project is the WUG, located under the Coromandel Forest Park. The

[1] Conservation Act 1987, s 6.

[2] Director-General of Conservation "Waihi North [FTAA-2504-1046] - s 51 FTAA Covering Report – Department of Conservation" (11 August 2025), paras 6 – 7, page 1.

[3] Ibid., paras 8 – 13, page 2.

application acknowledges a range of actual and potential effects on conservation values within the Coromandel Forest Park, and on public conservation land and private land outside the Coromandel Forest Park.

13. A brief summary of key conservation values of concern to DOC is provided in the following sections. The focus is on those significant conservation values where effects and effects management are in contention.

Leiopelmatid frogs

14. New Zealand native frogs belong to the genus *Leiopelma*, an ancient and primitive group of frogs that has changed very little in 70 million years and are of great evolutionary significance.[4] They are endemic to New Zealand. Of the six species that have been described in New Zealand, three are now extinct, and the distribution of the surviving three species is reduced to small remnants compared to their pre-human distribution. Extinctions and much reduced distribution correlate with human settlement and the arrival of introduced mammalian predators such as rodents.

15. Two species of native frogs occur in Coromandel Forest Park above the proposed WUG: Archey's frog (*Leiopelma archeyi*) and Hochstetter's frog (*L. hochstetteri*). The conservation status of both species is "At Risk – Declining" according to the New Zealand Threat Classification System[5]. Archey's frog is classified as "Critically Endangered" on the International Union for Conservation of Nature Red List. Apart from a small remnant population at Whareorino (King Country), its entire natural population today is confined to the Coromandel Peninsula.

16. Unlike other frog species, leiopelmatid frogs do not have external eardrums and therefore likely rely on vibrations and chemical signals to survive. Both species are long-lived (18-39 years), have a low rate of reproduction and are strongly site-faithful. As discussed further below, these features are relevant to assessing the potential effects of the Project on these species.

Other indigenous terrestrial fauna

17. Areas affected by the Project (both on and off public conservation land) are also used by a range of other indigenous fauna, including threatened and protected avifauna and lizards, as outlined in the application.

[4] Ben D Bell "The threatened Leiopelmatid frogs of New Zealand: natural history integrates with conservation" (2015) 5(3) Herpetological Conservation and Biology 515.

[5] Burns et al "Conservation status of amphibians in Aotearoa New Zealand, 2024" (February 2025) New Zealand Threat Classification Series 44.

Terrestrial flora

18. Areas affected by the Project contain known populations of threatened plant species, as outlined in the application documentation. DOC's primary interest relates to the vegetation clearance activities proposed within the Coromandel Forest Park to support a range of drill sites. Flora species within these areas are comprised mostly of secondary regrowth broadleaf forest, kauri stands and kānuka scrub. These areas also provide habitat for a number of threatened native species as acknowledged in the application.

Freshwater values

19. The area potentially affected by the Project contains a number of freshwater catchments, both on and off public conservation land. Indigenous species known to be present including the "At Risk – Declining" longfin eel and kōaro; and the non-threatened shortfin eel, common bully, Cran's bully and kōura. One introduced species (rainbow trout) is also present.

20. The Mataura wetland and other smaller wetlands are also potentially affected. The Mataura wetland (not public conservation land) is likely a remnant of a larger historic wetland as indicated by the presence of mature swamp maire ("Threatened – Nationally Vulnerable").

Heritage and Recreation values

21. The area within the Coromandel Forest Park that is affected by the Project ('Area 1') contains front country, back country and remote visitor management zones as defined in the Waikato Conservation Management Strategy 2014 (WCMS). Recreational use of the area is mostly users of the Wharekirauponga Track and hunters. The Wharekirauponga Track is listed as a "local treasure" within the WCMS. While the Wharekirauponga Track is currently partially closed due to kauri dieback, its high heritage and recreational values mean that DOC intends to reopen the track in the future. The first 750 m of the track remains open. The back country and remote zones are characterised by recreation opportunities in large scale natural settings. This area would be utilised by hunters and experienced trampers.

22. The area contains known and managed historic mining and kauri logging sites, and the Wharekirauponga Track follows the route of the historic Royal Standard Tramline. Along the route is evidence of historic activity and the area has been prioritised in the DOC land management system as an "Actively Conserved Heritage Place" The area includes the Hauraki District Council's Wharekirauponga Heritage Area (HAU271).[6]

[6] Hauraki District Plan, section 6.1 Historic Heritage, at 6.1.6.6, page 38, and map 18.

4. Effects of the proposal on conservation values

Effects on leiopelmatid frogs

23. The application sets out a summary of OGNZL's assessment of effects on leiopelmatid frogs, based on the report prepared by Boffa Miskell (2025a).[7] The application identifies effects on leiopelmatid frogs as arising from the following potential causes: [8]

- *"Habitat loss and / or mortality associated with the clearing of ventilation shaft and exploration drilling areas;*
- *Potential air quality effects from ventilation evasé;*
- *Potential habitat modification if groundwater drawdown leads to surface water effects; and*
- *Vibration from underground blasting activity*."

24. DOC's comments below focus on vibration effects. Vibration effects were not addressed in DOC's section 51 reports for the following reasons:

- **Access arrangement report (Wharekirauponga Access Arrangement)** – The application does not include an access arrangement for activities carried out below the surface of the land (section 57 of the Crown Minerals Act 1991).[9]
- **Concession report (Northern concession)** - The area of the Northern concession is outside the vibration footprint.
- **Wildlife approval** – It is not yet clear whether OGNZL is seeking approval for potential harm to frogs caused by vibrations.[10]

25. Other relevant effects arising from the activities listed above have been addressed in the concession, access arrangement and wildlife approval section 51 reports. A brief comment on these other effects is provided below.

26. Before addressing these effects, DOC provides some initial comments on frog populations.

[7] Boffa Miskell Limited "Waihi North Project: Terrestrial Ecology Values and Effects of the WUG" (20 February 2025) B.37.
[8] Mitchell Daysh Limited "Waihi North Project - Substantive Application Report" (2025) at A.09, section 6.6.1.1, page 422.

[9] At A.07 section 4.3.2, page 339 - 340; See also Director-General of Conservation "Appendix F - Access arrangement report" (11 August 2025) at para 13, page 5.

[10] Director-General of Conservation "Appendix D - Wildlife approval report" (11 August 2025), at para 179, page 32.

Population numbers

27. A key component of estimating impacts and mitigation outcomes for the Archey's frog is the size of the population within the expected impacted area, and what proportion of the entire species' number this represents.

28. The relevant report by Brian Lloyd submitted with the application estimates between 48,888 and 161,708 frogs are present in the mine's 'vibration footprint' area and therefore potentially impacted[11]. This estimate is based on intensive surveys within the specific area, and is not disputed by DOC.

29. However, the same report calculates that this number represents 0.61% to 1.1% of the species' Coromandel population,[12] leading to the conclusion that even if all frogs in the footprint area would be severely impacted, the impact on the overall population would still be 'low'.[13] DOC strongly disputes the estimate of the affected proportion, and the conclusion.

30. Lloyd's estimate is based predominantly on an extrapolation of frog numbers confirmed in the footprint area over available habitat elsewhere on the Coromandel Peninsula. Such an extrapolation neither takes into account the known patchiness of Archey's frog populations, nor a recorded decline in the late 1990s by more than 88% of the known Coromandel-wide population, suspected due to amphibian chytrid fungus,[14] without subsequent recovery to pre-decline levels.[15] In plain terms, if such estimates were close to reality, Archey's frogs would be found in large numbers across many parts of the Coromandel, which is not the case.

31. In DOC's recent update on native frogs in the New Zealand Threat Classification System,[16] the overall population size of Archey's frog is estimated as more than 100,000 individuals, with a predicted ongoing decline.[17]

32. OGNZL's report acknowledges that with the currently available information it is not possible to obtain robust estimates for the area occupied/densities of Archey's frog in the Coromandel due

[11] Brian D. Lloyd "Estimating the Proportion of Coromandel's Archey's Frog Population in the Area Affected by Vibrations from the Proposed Wharekirauponga Underground Mine" (23rd January 2025) B.41 at page 46.

[12] Ibid., page 48.

[13] RMA Ecology "OGNZL Wharekirauponga mine: potential adverse effects on native frogs. Report prepared for OceanaGold (NZ) Ltd" (13 January 2025) B.38 at page 8.

[14] Bell et al "The recent decline of a New Zealand endemic: how and why did populations of Archey's frog *Leiopelma archeyi* crash over 1996–2001?" (2004) 120(2) Biological Conservation 189.

[15] Burns et al. "Conservation status of New Zealand amphibians, 2017" (2017) New Zealand Threat Classification Series 25.

[16] Burns et al "Conservation status of amphibians in Aotearoa New Zealand, 2024" (February 2025) New Zealand Threat Classification Series 44.

[17] Ibid.

to variance in surveying.[18] Nevertheless, the conclusions drawn from its findings have provided a foundation for the overall impact to be assessed as 'low'.

33. The only robust estimate currently available is of the number of frogs within the vibration footprint area, confirming a large population of leiopelmatid frogs at Area 1. DOC considers that this is directly relevant to assessing the scale of the potential effects discussed in the subsequent sections.

Effects of vibrations

34. DOC agrees with OGNZL's consultant reports that the role of anthropogenic substrate vibrations in disrupting animal behaviour is poorly understood, and that the field is largely unresearched.[19] Leiopelmatid frogs do not have external eardrums, so they are more reliant on sensing vibrations to hunt their prey and avoid predators. Due to their reliance on sensing vibrations, both OGNZL and DOC agree it is likely that they are also able to detect vibrations, ground shocks and some sounds arising from the Project's underground mining activities beneath the Coromandel Forest Park.[20] There is disagreement however, as to the extent to which leiopelmatid frogs will be affected by the vibrations.

35. Abandonment of shelter, male frogs abandoning their guard of egg clusters and other behavioural changes that could lead to lower health and recruitment success for individual frogs and the affected population have been observed following disturbance.[21]

36. Hochstetter's frogs' tolerance to ground shocks and vibrations is likely to be greater than for Archey's frog as it experiences periodic ground disturbance along the watercourses at times of heavy rain and turbulent flooding. Nevertheless, the impact the vibrations through the Wharekirauponga Underground Mine is also uncertain for Hochstetter's frogs.

37. DOC agrees with OGNZL's approach to design its impact mitigation measures based on a worst-case scenario. That is, all frogs within the vibration footprint of the proposed mine will be affected to a degree that lowers their individual and the affected population's fitness.

Effects of dewatering

38. Both Archey's and Hochstetter's frogs spend most of their lives undercover in retreat sites in close contact with the substrate, especially during the day and during drier periods, to maintain their water-balance.

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[18] B.D Lloyd, above n 11, at 49.

[19] Bioresearches "Native Frog Effects Assessment – Report for OceanaGold New Zealand Limited" (17 February 2025) B.39 at section 5.2, page 28.

[20] At section 5.4, page 31.

[21] Pers. Comm. Dr Ben D, Bell.

39. Underground mining-induced impacts include subsidence and slumping, altered water flows, water-table lowering, and fracturing of surface and sub-surface rocks.[22] Should these factors occur with this project, especially within 'Area 1', they would significantly modify the leiopelmatid frogs' semi-aquatic and terrestrial habitats: Hochstetter's frog would be adversely affected by changes in hydrology and sedimentation; Archey's frog would be adversely affected by subsidence and slumping, plus changes in local hydrology, with damage to retreat, feeding and breeding sites. Any potential damage would be persistent past the cessation of mining operations as alteration to the water table cannot be remedied easily.

Effects of vegetation clearance activities and other effects of mining activities

40. Archey's frogs are highly site-faithful to the point that a specific micro-site would be utilised by the same frogs over years.[23] As acknowledged by OGNZL, vegetation and habitat clearance for the establishment of drill sites, vent shafts etc. will therefore directly impact any frogs residing at the specific site, either through injury or mortality or the destruction of their localised habitat.

Summary of effects on frogs

41. Leiopelmatid frogs in the Project's area are at risk of effects from the proposed activities due to blasting vibration, dewatering and above-ground activities including habitat removal.

42. There is a high degree of uncertainty associated with the level and likelihood of effects which cannot be resolved with the current level of understanding.

43. DOC considers these potential effects on the level of individual frogs, the affected part of the populations and the species as a whole, are significant due to the threat status and vulnerability of the species.

44. While DOC disagrees with OGNZL's assumption that the risk of these effects occurring, and their impact, are low,[24] DOC agrees with the approach OGNZL has taken to design the Project's effects mitigation to address the remaining "uncertainties regarding potential effects on native frogs",[25] i.e. a "worst case scenario".[26]

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22 Birhanu B. Mencho "Assessing the effects of gold mining on environment: A case study of Shekiso district, Guji zone, Ethiopia" (December 2022) Heliyon 8(12) DOI:10.1016/e11882; Zhang et al "Effects of underground mining on soil-vegetation system: a case study" (1 September 2023) 9 Ecosystem Health and Sustainability DOI:10.34133/ehs.0122.

23 Wren et al "A review of New Zealand native frog translocations: lessons learned and future priorities" (2023) 47(2) New Zealand Journal of Ecology 3538. See also: Bell et al "Highlights of long-term studies of endemic New Zealand frogs (Anura: Leiopelmatidae) over several decades" Ecological Interactions 2, (abstract presented at 9th World Congress of Herpetology, Dunedin New Zealand, 5-10 January 2020).

24 Bioresearches, above n 19, at B.39 Table 7.2, page 59.

25 Ibid at page 62.

26 Mitchell Daysh Limited, above n 8, at A.09, section 6.6.1.1, page 427.

Effects on other indigenous terrestrial fauna

45. Within Area 1, DOC's primary interest in relation to other indigenous terrestrial fauna is the effects caused by vegetation clearance at drilling sites. Other effects from proposed activities include lighting (bats) and helicopter use (avifauna). See paragraphs 82 – 89 of DOC's section 51 Access Arrangement report and paragraphs 41 – 56 of DOC's section 51 Concession Report for more information.

46. Within the wider Waihi area of the Project, DOC's primary interest relates to lizards. DOC's comments on the effects of the proposed activity on lizards within these areas are provided in DOC's section 51 Wildlife Approvals report (see paragraphs 37 – 46 and 60 – 67) for more information.

Effects on terrestrial flora

47. Within Area 1, a total of 6,600 m^2 vegetation clearance is proposed for the new drilling activities. In addition, the forest throughout Wharekirauponga contains kauri ("At-Risk – Declining") in high numbers and density, and without sufficient mitigation, is at risk of *Phytophthora agathidicida* (PA) known as kauri dieback disease. For DOC's comments on the effects of the proposed activities on terrestrial flora values, see paragraphs 80 – 97 of the DOC section 51 Access Arrangement report and paragraphs 71 – 74 of the DOC section 51 Concession report.

Freshwater effects

48. DOC has concerns about the effects of the Project on freshwater values both within the Coromandel Forest Park and outside it. While DOC's section 51 Access Arrangement and Concessions reports cover effects on freshwater, these issues are also relevant to the Waikato Regional Council consents.

49. DOC's comments on the potential effects of mining activities within the Coromandel Forest Park on freshwater values are set out in DOC's section 51 Concession report at paragraphs 98 – 104 and paragraph 57 of DOC's section 51 Access Arrangement report. Effects on freshwater values in other areas affected by the Project are discussed below.

Effects on wetlands

50. The GHD report prepared for the applicant states that the proposed mining may result in a loss of 19% of the Mataura wetland catchment area which will result in a reduction of flow to the wetland by 17%.[27] The Mataura wetland is appropriately 0.28 ha in extent and contains some remnant historical wetland vegetation including swamp maire, classified under the NZTCS as

[27] GHD "Waihi North Ground Water Assessment" (26 February 2025) B.26a at Appendix M, at section 3.3, page 4.

"Threatened – Nationally Vulnerable", due to myrtle rust.[28] As stated in the Boffa Miskell report,[29] the swamp maire population is largely reduced to small, sparse stands of trees within partially drained farmland such as the Mataura wetland.

51. A reduction in flows of 17% and extending low flow conditions to a wetland is likely to be detrimental for the wetland environment and may cause a greater effect than that stated in the GHD report.[30] There is no assessment in terms of how the indigenous vegetation present in the Mataura wetland, including the threatened swamp maire, will respond to the loss in catchment area.

52. The creation of the Gladstone Open Pit will result in the reclamation of 47 m of an ephemeral stream that feeds into the existing Gladstone Pit wetland (Area 5). The impacts include loss of riparian vegetation, loss of habitat, reduced aquatic connectivity and sediment discharges from construction.

53. The report states that "there are unlikely to be any direct or indirect (hydrological) effects on the Gladstone wetland resulting from the loss of 0.14 ha of the upper headwater gully (including the 47 m of intermittent headwater gully)".[31] It further states that "the reduction in groundwater discharge by approximately 33% and reduction in groundwater level of approximately 0.5 m adjacent to Gladstone wetland is expected to be unmeasurable given the natural variability within the wetland".

54. DOC considers that a reduction in groundwater discharge of 33% is likely to have a net-negative impact. It will extend the low flow conditions on the wetland environment, even with the large variability in water levels. This reduction may cause a greater effect than that stated by applicant's reports including lengthening the time that the wetland is dry. Increasing the time that a wetland is dry will harm the ecological functioning of the wetland and may cause any riparian or wetland planting to not succeed.

Effects on tributaries, streams, and drains

55. Freshwater species across the Wharekirauponga Stream (outside of Area 1), Mataura Stream, the Ruahorehore Stream, and the Ohinemuri River include longfin eel ("At-Risk – Declining"), shortfin eel, Cran's bully, common bully, kōura, and rainbow trout.

56. A rock stack is proposed to be sited on an unnamed tributary of the Mataura Stream approximately 200 m upstream from the confluence with the stream (Area 2). The creation of

[28] de Lange et al. "Conservation status of vascular plants in Aotearoa New Zealand" (2023) New Zealand Threat Classification Series 43.

[29] Boffa Miskell "Waihi North Project: Freshwater Ecological Assessment" (26 February 2025) B.43 at section 7.1.33, page 30.

[30] GHD, above n 27, at B.26a, Appendix M.

[31] Boffa Miskell "Waihi North Project: Freshwater Ecological Assessment" (26 February 2025) B.43 at 16.1.5, page 77.

this rock stack will result in 558 m of stream (permanent and intermittent) being temporarily lost from tributary 2. The rock stack is expected to have a 10-year lifespan. The loss of this tributary while the works are ongoing will have a significant impact on freshwater biodiversity currently inhabiting the stream.

57. OGNZL outlines that freshwater-related works in the Tailings Storage Facility (Area 7) include diversion of 2,118 m of Ruahorehore Stream, tributaries and associated drainage canals to form 2,503 m of diverted watercourse. The impacts from the diversion include reduced aquatic connectivity and sediment discharge during construction.

58. The application states that only the lower 1,800 m of the Ruahorehore diversion will be 'ecologically functional' while the upper part of the diversion is a 'cleanwater diversion'. It is unclear what the design of this 'non-ecologically functioning' section of the diversion will be as the draft Diversion and Development Plan states that "this plan only applies to stream diversion channels and doesn't include clean water diversion channels that are intended only to move water and have no ecological value".[32]

59. There are inconsistencies between what the map key describes as 'cleanwater diversion channel' and the terminologies used in the Diversion and Development Plan. It is unclear which ecological functions will be lost, as DOC has not seen the design of the diversions. DOC's view is that the entire diversion needs to be ecologically functioning.

60. The tributary labelled TB1 waterway is itself a previous diversion that was created from an earlier expansion of a mining operation.[33]

Effects on heritage and recreation

61. Without proper site selection protocols for drilling activities, there could be adverse effects on heritage and recreation.

62. For DOC's comments on the effects of the proposed activities on heritage and recreation values, see paragraphs 105 – 112 and paragraphs 115 – 117 of DOC's section 51 Access Arrangement report and paragraphs 58 – 70 of DOC's section 51 Concession Report.

5. Proposed mitigation measures

63. The following section outlines DOC's comments on the proposed mitigation measures proposed by OGNZL to address the effects outlined above.

[32] Boffa Miskell "Waihi North Project: Freshwater Ecological Assessment" (26 February 2025) B.43, Appendix 14, page 2.

[33] Ibid.

Measures to address effects on leiopelmatid frogs

64. OGNZL has proposed a series of measures to manage the effects of activities on leiopelmatid frogs and other related ecosystem values. This is summarised in the application as follows:[34]

> *"Notwithstanding the conclusions set out above, there remains a low (but uncertain) risk for this project to generate residual adverse effects on native frogs. OGNZL accepts that, insofar as effects on frogs are concerned, a precautionary approach is necessary. Key measures to support this approach include:*
>
> - ***Further mitigation:*** *intensive pest control within 314 ha of the WUG surface footprint (where surface vibrations greater than 2 mm/sec are expected) to deliver benefits specifically for Archey's frogs (and associated benefits for Hochstetter's frogs);*
> - ***Offset enhancements:*** *Intensive pest control within a 318 ha area (outside of the vibration footprint) of frog habitat that is superior habitat to that which is located within the WUG footprint; and*
> - ***Compensation: I****n the form of financial support for researchers to undertake investigative work within the WUG and wider habitat (frog) enhancement areas to assess the efficacy of pest control regimes for frog recovery, and surveys of the broader Coromandel Peninsula to better understand the distribution and habitat preferences of native frogs."*

65. For Archey's frog, OGNZL states that these measures will result in a three-fold increase of the managed population.[35] As outlined below, DOC does not consider this outcome is realistic or even ecologically feasible over the timeframe considered for these measures.

66. It is DOC's view that, after considering OGNZL's proposed actions to avoid, mitigate, remedy, offset and compensate for adverse effects, the overall outcome will likely not result in a net-gain for leiopelmatid frogs. This is due to some of the proposed measures not being at the appropriate scale (e.g. pest control area), having been shown to have a low rate of success and impact (e.g. salvage translocations) or relying on unproven, experimental or non-approved methods (e.g. pest control techniques).

67. DOC has provided detailed feedback on these aspects of the Project to OGNZL, some of which has been reflected in changes made to date. However, significant further changes to the proposed mitigation measures are required to lower the risk of failure to achieve stated outcomes. DOC would welcome the opportunity to engage further with OGNZL on these points.

68. DOC's specific comments on relevant aspects of the proposed measures are set out below.

[34] Mitchell Daysh Limited, above n 8, at A.09, section 6.6.1.1, page 424.

[35] RMA Ecology, above n 13, at B.38 table 4, page 23; see also Boffa Miskell Limited "Draft Pest Animal Management Plan: Wharekirauponga Compensation Package" (24 February 2025) at B.40, page 7.

Terrestrial Offsetting Ratio

69. OGNZL has offered 318 ha of pest control to "offset" effects within the 314 ha vibration footprint. DOC considers such a one-to-one ratio too low and very likely to be insufficient to offset effects, based on current[36] and emerging[37] best practice.

70. As a relevant example, even a 19-fold increase in habitat through offset measures only resulted in an approximately 1.2 to 3.5-fold in increase in the original population size post offset for a population of green and golden bell frog (*Litoria aurea*) in Australia.[38]

71. The proposed resource consent conditions do not reflect the same population-level increase that OGNZL's reports state will be achieved (three-fold). Monitoring for frogs required at Hauraki District Council land use consent condition 173 states:

> The Consent Holder must continue pest control within the WAPMA in accordance with the WPAPMP until the later of:
>
> i. Two years after the completion of stoping activities within the Wharekirauponga Underground Mine; or
>
> ii. Monitoring undertaken in accordance with Native Frog Monitoring Plan required by Condition 174 shows leiopelmatid frog numbers within the WAPMA are no lower than would be expected in this area had the mining activity not occurred considering frog numbers in nearby habitat which was unaffected by blasting vibration.

72. This is therefore framed as a "no-net loss" outcome rather than a "net gain" outcome. Achieving only a no-net loss outcome, as stated in condition 173, is not consistent with outcomes stated in the substantive application reports to ensure that adverse effects of the activity on native frogs are appropriately managed. As discussed further below in paragraphs 129 - 143, an offset under the National Policy Statement for Indigenous Biodiversity 2023 (NPSIB) should achieve a net gain.

73. If the application purports that the pest control will at least triple the population of the frogs in the vibration footprint, then the resource consent conditions should include performance targets that reflect this. This is not currently the case.

Frog recovery rate used in models

74. DOC's main concern with the models OGNZL has used is the input parameter "Benefits of pest control programme for frogs and certainty of benefit" which they have kept constant in all

[36] Maseyk et al "Biodiversity Offsetting under the Resource Management – A Guidance Document" (2018) prepared for the Biodiversity Working Group on behalf of the BioManagers Group, Wellington.

[37] Wells et al "Optimising biodiversity offsetting to account for habitat 2 succession and species colonisation dynamics" (in review).

[38] E.J Pickett et al "Achieving no net loss in habitat offset of a threatened frog required high offset ratio and intensive monitoring" (January 2013) 157 Biodiversity Conversation 156.

models as “multiplier of 3.0 x over a 15 year period, which we consider to be realistic/precautionary”.[39] This means OGNZL’s consultant ran the models 35 times, varying the proportions of frog population impacted and varying the levels of confidence in the success of pest control, but the level of benefit after 15 years of pest control remained constant at tripling the current population.

75. This implies an unjustified level of certainty in the predicted tripling of population. Varying the confidence around this value is not the same as varying the value itself as none of the models used (Basic, BOAM, and BCM) deal with uncertainty well. There is currently very little information on successful Archey’s frog recovery as OGNZL’s proposal is the largest pest control operation ever proposed for that species. DOC only has one study (from Whareorino Forest) which examines outcomes of predator control for specifically Archey’s frog.

76. Overall, this means that the models have not been built to account for the worst-case scenario – i.e. the potential for the proposed pest control to have no or minimal impact, or even simply result in less than tripling the frog population numbers.

77. For example, Table 6 of the RMA Ecology report shows that even if the estimated population in the mine footprint/vibration area (314 ha) drops by 50% by year 11 (end of mine operation) to 45,000 frogs,[40] the model states that in another four years of pest control (by year 15) the population within the footprint has tripled to 135,000 frogs, with an additional 181,000 frogs in the offset area. Even in the worst-case scenario, with a 100% decline in population over the 11 years, the model still predicts an increase of 134,000 frogs over the final four years to the end of year 15.

78. Regardless of the impact of the pest control, it is biologically improbable that Archey’s frogs would be able to re-enter the area and reproduce quickly enough to reach the stated 134,000 numbers after four years. The species is known for its small home range, low fertility rates, small egg numbers, and slow post-metamorphosis growth. These increases also do not take into account any carrying capacity limits of the available habitat.

79. The results from the main study available, at Whareorino, have shown that a 10% increase annually for Archey’s frogs over the course of 12 years was achievable with rat control, with a 95% confidence interval of 4.62% and 17.42%.[41] Even using the high end of the confidence interval, a doubling or tripling of the population could not be expected for the species over this timeframe, neither at Whareorino nor any other site.

[39] RMA Ecology Ltd, above n 13, at B.38 Table 4, page 23.

[40] RMA Ecology Ltd, above n 13, at B.38, page 29.

[41] Germano et al “Age dependent effects of rat control on Archey’s frog (*Leiopelma archeyi*) at Whareorino, New Zealand” (2023) 47(2) New Zealand Journal of Ecology 3529.

Pest management plan

Summary

80. OGNZL proposes, as conditions of the resource consents, and of the wildlife approvals and access arrangement, that the pest management activities to be undertaken within the Coromandel Forest Park must be undertaken in accordance with the Wharekirauponga Pest Animal Management Plan (WPAMP).

81. DOC has recommended several improvements to the WPAMP through technical workshops with OGNZL. DOC has not seen any amended versions of the WPAMP and therefore it is uncertain whether OGNZL has implemented DOC's feedback. DOC reiterates its comments here.

82. If it delivered according to the design in the WPAMP, DOC considers the pest control will provide some benefit to frog populations. However, the size of this benefit is unknown and requires monitoring to confirm.

83. DOC considers mice, rats and pigs to be the pests that are of the greatest level of impact on native frogs and that therefore control of these pest species should be delivered to a high standard and, where available, established best practice.

84. Provided the scale of aerial and ungulate control is increased as recommend by DOC (see below) and proven tools are used, a ground-based bait station/trapping network overlayed with a three yearly aerial 1080 operation should adequately reduce numbers of possums, rats and mustelids. The addition of trapping will assist in reducing predators in the years between 1080 operations. DOC generally agrees with the proposed methods selected for deer and goat control with ground-based shooting being used as the main control method.

General approach to pest control

85. This is the first time that pest control of this scale and intensity has been proposed to protect native frogs in New Zealand, and some components of the WPAMP need to be considered experimental rather than established and proven practice.

86. Given the evidence from the above-cited Whareorino study, there is moderate confidence that continuous rat suppression at the project site could result in a positive change in frog abundance outside the vibration footprint. However, differences in habitat, altitude and pest species to be controlled, and any negative impact of mining activities on the frog population, mean that there is less confidence that the frog population will increase at a similar rate, even with the proposed pest control.

Use of hazardous substances to control pests

87. All hazardous substances in New Zealand need an approval from the EPA under the Hazardous Substances and New Organisms Act 1996. Several of the tools and toxins

suggested for control are still in development (such as Norbromide), unproven or not registered for the use stated (Diphacinone + Cholecalciferol to control mice).[42] Unproven tools[43] and toxins should be omitted from the WPAMP until they have been approved for use in New Zealand.[44] Regular reviews of the WPAMP will instead provide OGNZL the opportunity to update for best practice and include the latest certified tools and toxins.

Ground control

88. OGNZL proposes to apply toxin in bait stations once a year between June and September, however frogs are vulnerable year-round. Applying toxin once a year will not achieve the target for rodents. In DOC's experience, baiting six times a year may still not be enough to maintain the suggested reduction target in the proposed 632 ha area of ground-based pest control. This uncertainty could be addressed by ensuring monitoring occurs regularly enough to pick up changes in pest species abundance. DOC recommends that monitoring of rodents occurs once a month within the core operational area and bait stations are kept loaded with toxin year-round.

The scale of pest control

89. The 1000 ha area in which OGNZL proposed to undertake aerial pest control is too small to suppress pest animals effectively and efficiently. There will be near constant reinvasion of the 632 ha core area, which would require more onerous pest control to reduce numbers to the targets set out in the WPAMP. In DOC's experience, reinvasion from the surrounding uncontrolled areas will be rapid, reducing the time rodent abundance is kept low to about two months following an aerial pest control operation before ground-based control is required.

90. DOC recommends expanding the area of operation, so that the core protected area will have a larger buffer from reinvasion and therefore will be able to meet the targets set out in the WPAMP with higher likelihood. An increase in area could keep rat abundance to targets levels for at least six months and potentially up to nine months. During technical conferencing with OGNZL, DOC provided an alternative area footprint that would be more successful based on current understanding.

91. Despite maps in the WPAMP showing perfect placement of bait stations, in reality some areas will be inaccessible for ground control methods, including areas of kauri forest that should be avoided due to kauri dieback concerns. DOC agrees with OGNZL's proposal to overlay ground control operations with aerial pest control to reduce the impact of these gaps in pest control network and the associated reinvasion.

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[42] DOUBLE TAP® Pellet Bait is a single feed possum and rat bait.

[43] Such as the exceedance of rat thresholds referred to at p 57 of the WPAMP.

[44] For toxins in which controls have been set by the EPA (such as 1080), as noted by OGNZL, it will also need authorisation to apply vertebrate toxic agents to public conservation land, under s 95A of the Hazardous Substances and New Organisms Act 1993.

Control of mice

92. While DOC agrees with OGNZL that mice need to be controlled to achieve a sustained and meaningful protection of native frogs, it is unlikely that the measures set out in the WPAMP will be successful in controlling mice.

93. Landscape-scale mouse control in unfenced mainland sites, contrary to what has been claimed by OGNZL reports[45], has not been achieved in New Zealand to the level required here. The proposal therefore needs to be considered experimental in approach. DOC agrees, however, that pest control targeting mice is worthwhile to undertake provided it is robust and well-monitored and thereby fills current knowledge gaps.

94. A 100 m bait station grid as proposed is unlikely to supress mouse numbers to target due to their relatively small home range. DOC recommends that the bait stations be at maximum 25 m apart in a grid arrangement.[46]

95. DOC does not consider that chew card indexes are appropriate as the primary monitoring tool to measure abundance of rodents. It would be more appropriate to use tracking tunnels, which would allow for the WPAMP results to be compared against the Whareorino study for its effectiveness at increasing the leiopelmatid frog populations.

Control of pigs

96. As stated in the WPAMP, "Feral pig control should form a key part of any population restoration attempts".[47] The proposed control target is zero density. DOC considers this an appropriate target for feral pigs in frog areas but contends that changes to the proposal are required to achieve this.

97. Ground hunting is proposed as the primary method to control pigs; however, this method will not achieve the desired target over what is a relatively small area, with no barriers to prevent reinvasion. While ground hunting/trapping works to reduce feral pig populations, DOC is unaware of any site where feral pigs have been successfully managed and maintained to zero density over a landscape year-round using only this method.

98. DOC recommends that fencing to exclude pigs from the area is included as a tool to limit pig impacts. This is considered the only way to ensure zero density targets are met over at least

[45] Boffa Miskell Limited "Draft Pest Animal Management Plan: Wharekirauponga Compensation Package" (24 February 2025), B.40, page 24 - 25.

[46] Hamilton, B. "Optimum spacing of bait stations for controlling house mice (*Mus musculus*) during mast seeding in a beech (*Nothofagus*) forest" in B. R. Paton, M. J. Maitland, T. A. Bruce, J. A. Wotherspoon, A. K. Brow, S. A. Leggett & D. T. Chisnall (Eds.), *Rotoiti Nature recovery project annual report July 2005 - June 2006. St Arnaud's Mainland Island, Nelson lakes National Park.* (pp. 95-109). Nelson, New Zealand: Department of Conservation, Nelson/Marlborough Conservancy.

[47] Boffa Miskell Limited "Draft Pest Animal Management Plan: Wharekirauponga Compensation Package" (24 February 2025) at B.40, page 5.

part of the frog habitat. Exclusion fencing is the method most likely to succeed in protecting frogs from pig predation and may be the most socially palatable.

Ineligible activities

99. As discussed in DOC's report on completeness dated 19 March 2025, the application includes "ineligible activities". Schedule 4 of the Act covers "Land on which non-mining activities are ineligible". Schedule 4 of the Act includes the following areas:

    i. Clause 9 of Schedule 4 refers to "the area described in the Otahu Dedicated Area Notice 1976 (Gazette 1976, p 654)."

    ii. Clause 10 of Schedule 4 refers to "the area described in the Parakawai Geological Area Notice 1980 (*Gazette* 1980, p 2408)."

100. OGNZL has clarified in its application that it is not seeking approval to undertake activities on land identified as ineligible.[48] However, the WPAMP still includes Schedule 4 areas on the maps. The WAPMP will need to be modified accordingly to exclude those areas and provide additional sites to undertake pest control to reach the same mitigation requirement or not be exercised until the additional permissions are granted.

101. DOC understands that OGNZL intends to apply for a concession and/or a pest control operation under the Conservation Act 1987, outside of the fast-track process.

Effects of vegetation clearance activities

102. Measures proposed by OGNZL to avoid adverse effects on frogs from the proposed vegetation and drilling activities include site selection protocols (utilising a multi-criteria assessment (MCA)), ecological surveys prior to vegetation clearance, fencing and salvage and translocation. Under the resource consents, these requirements are set out in the HDC conditions, 111 – 166 and conditions 13 – 32 of the TDC conditions. The site selection protocol is proposed to be annexed to both sets of conditions. The same framework is provided in the draft conditions for the Wharekirauponga Access Arrangement and the Northern Concession.

103. DOC provided its views on these proposed mitigation measures in its section 51 reports on the Wildlife Approvals (salvage)[49] and Concessions and Access Arrangement reports (site selection criteria and salvage)[50]. DOC adopts the statements made in those reports on these topics as applicable to the corresponding consent conditions for the resource consents. A

[48] Mitchell Daysh Limited, "Waihi North Project - Substantive Application Report" (2025) at A.11, section 8.6, pages 567-568.

[49] Director-General of Conservation "Appendix D - Wildlife approval report" (11 August 2025), at paragraphs 96 – 154)

[50] Director-General of Conservation "Appendix F - Access arrangement report" (11 August 2025) at paragraphs 68 – 75; Director-General of Conservation ' Appendix C – Concession report; (11 August 2025) at paragraphs 84 – 81).

summary of the changes DOC considers and needed to the relevant HDC and TDC conditions and site selection protocol are set out in paragraphs 172 – 176, below. In terms of native frog salvage specifically, DOC notes the comments in the section 51 reports around the insufficiency of the salvage protocols contained in the ELMP-WUG as currently drafted, and the fact that DOC has not yet been provided with a copy of the Native Frog Salvage Release Plan.

Monitoring

104. DOC considers that robust outcome monitoring for frogs is a critical component of the Project. Monitoring needs to provide data of sufficient quality to enable an assessment as to whether the mitigation methods as implemented have achieved the stated outcomes. Due to the untested assumptions and experimental nature of parts of the proposal, the monitoring will also provide the main insights into whether the fundamental basis underpinning the mitigation regime (i.e. that intensive pest-management will result in a net-gain for the frog population) is accurate. Under the conditions as currently drafted, the 'response' to concerns identified by the monitoring would be to trigger a s128 condition review to assess whether changes to the mitigation regime are required (condition 212 of the HDC condition set and as requested for the TCDC condition set).

105. DOC has already provided detailed feedback to OGNZL on the proposed Native Frog Monitoring Plan as submitted[51] as set out in DOC's section 51 wildlife approval report, paragraphs 155-173.

106. While DOC is generally supportive of the objectives of the proposed monitoring as stated in the condition set (conditions 174 – 176 HDC conditions) and in agreement with some of the methods proposed in the plan, DOC considers that the plan in its current state requires improvements to ensure that methods are rigorous and the knowledge gained is statistically robust. This is critical to evaluating outcomes and informing future protection of frogs.

107. Without the identified changes to the draft monitoring plan, DOC considers the proposed approach (monitoring, reporting and s128 review) is insufficient to ensure potential adverse effects to frogs can be appropriately identified and addressed. Given the critical importance of native frogs, DOC also considers that more targeted review conditions (rather than reliance on the general s128 review condition) should be considered, for example by implementing an adaptive management framework.

Measures to address effects on other terrestrial ecology

108. Within Area 1, the primary methods proposed to address effects on other terrestrial ecology are through the site selection protocol and associated conditions for the identification and clearance of drill sites (including salvage) – see conditions 111 – 166 of the HDC consent, conditions 13 –

[51] B.D. Lloyd "A Plan for Monitoring Potential Effects of the Proposed Wharekirauponga Underground Mine Project on Native Frogs" (February 2025) B.58.

32 of the TDC consent conditions and the Ecology and Landscape Management Plan (ELMP-WUG). Other species-specific management requirements associated with the vegetation clearance are identified in the HDC consents (avifauna – conditions 184 – 185, bats – condition 186 and terrestrial invertebrates – condition 187).

109. As above at paragraph 103, DOC adopts the comments made in its section 51 reports on the effectiveness of these mitigation measures. In addition to the comments provided in the Access Arrangement and Concession reports, comments in relation to proposed mitigation measures for effects on lizards within Area 1 are addressed specifically in the Wildlife Approval report at paragraphs 76 and 77 (avoidance and site selection) and salvage (paragraphs 78 – 81) and release (paragraphs 85 – 88). A summary of the changes DOC considers and needed to the relevant HDC and TDC conditions and site selection protocol are set out in paragraphs 172 – 176, below.

110. Outside Area 1, the primary mitigation method for addressing effects is under the Waihi Area Ecology and Landscape Management Plan, which contains sub-plans relating to avifauna, bats, and lizards. DOC's primary concern is lizards. DOC adopts the comments made in the Wildlife Approval report on the effectiveness of the proposed lizard mitigation measures (see paragraphs 76 and 77 (avoidance and site selection) and salvage (paragraphs 78 – 81) and release (paragraphs 85 – 88)).

Measures to address effects on heritage and recreation

111. DOC provided comments on the outstanding issues with the site selection protocol in terms of managing heritage effects in its section 51 Access Arrangement report - see paragraphs 114 – 117. These comments apply equally to the site selection protocol as incorporated into the HDC consent conditions.

112. For DOC's comments on the effectiveness of the proposed mitigation measures for managing effects on amenity, visual and recreation effects (through the conditions proposed for the applicable DOC approvals), see paragraphs 105 – 112 of the section 51 Access Arrangement report and paragraphs 99 – 106 of the Concession report.

Freshwater effects management

Area 1

113. OGNZL is proposing adaptive management for water loss in the form of a Wharekirauponga Underground Mine Water Management Plan ("WUG-WMP") and associated conditions in the WRC consents. The WUG-WMP outlines the monitoring, reporting and mitigation approaches that it will use for water management within Area 1. This includes identifying when the mining activities will be having an impact on water flows and then potential options available to mitigate the effects of this. An adaptive management approach is appropriate for the Project as there

are likely to be situations where the mining processes have unforeseen impacts that must be managed and/or mitigated.

114. DOC is unable to comment on the groundwater adaptive management as it does not have the appropriate expertise; however, the surface water interaction management proposals appear robust if OGNZL collects sufficient baseline information to be able to make informed decisions, particularly relating to seasonal flow variability. As discussed in relation to other aspects of the Project, the resource consent conditions need to have robust monitoring standards and practices to ensure that OGNZL will be able to identify if or when the groundwater levels change and need to implement adaptive management.

Overall freshwater effects mitigation

115. OGNZL has utilised a compensation ratio to inform the overall freshwater effects management approach it proposes. OGNZL's method results claim an '100%' offset for the loss of the ecological function and values'.[52] Across the entirety of the application area, OGNZL has stated there will be overall expected loss of some 4,122 m of low to high value stream loss as well as some 9 m^2 of warm spring. This is to be offset with the creation of 10,285 m of stream diversion channels and stream restoration. OGNZL is proposing riparian planting at an average ratio of 3:1 and DOC is satisfied with this approach.

116. However, based on DOC's assessment, the actual losses and gains are uncertain as they are inconsistent in the tables and assessments contained within the application documentation[53]. This makes it difficult to make an accurate assessment of the offsetting and compensation proposals.

117. DOC also notes that the application states that only 1,800 m of the 2,503 m Tailing Storage Facility diversion is intended to be 'ecologically functional', but Table 51 states that it "excludes [diversion streams] with no or little ecological functionality"[54]. If this is correct it would be even more of a shortfall in the calculations for offsetting.

118. The application also identifies 'enhancement planting' along the section of Tailing Storage Facility 3 that will not be ecologically functioning[55]. While riparian planting along this reach will likely have some benefit, particularly in helping to provide suitable conditions for fish to pass through, it is unclear if this has been counted as part of the enhancement package. If it has been, DOC recommends careful consideration of whether it is appropriate to include planting

[52] Boffa Miskell "Waihi North Project: Freshwater Ecological Assessment" (26 February 2025), at B.43 at section 22.1.14, page 133.

[53] Ibid. The summary tables of lost streams in the application totals 4119 m and includes more than just these two diversions. The calculations are correct from the details DOC can find in the application documents and include the additional stream losses (Willows Farm, warm spring etc.) that are not being recreated, but this doesn't match with the compensation calculation table presented in Appendix 9.

[54] Ibid, at section 22.1.14, page 133.

[55] Ibid., at section 22.1.16, figure 36, page 138.

alongside a non-ecologically functioning diversion channel as ecological enhancement of stream habitat lost.

119. The Boffa Miskell report states that planting plans should be in place to enhance the Mataura wetland and the riparian margins along the tributaries [56]. The ELMPs are the management plans that include vegetation rehabilitation and restoration but there is insufficient information about timeframes, species, spacing, fencing, pest control, releasing and performance standards. While additional planting and pest and weed management are positive effects, there is insufficient information to understand whether the extent and quality of the planting will provide sufficient offsetting and compensation for the lost values.

120. DOC recommends resource consent conditions that ensure long-term protection for the offset and compensated habitat. A covenant or equivalent over all the sites remediated, offset, or compensated is critical because the TB1 stream is noted to be an existing formed diversion that was created from an earlier expansion of mining operations.[57]

121. OGNZL has stated that they will replace streams back into their original locations one the mining is completed, however DOC cannot see any consideration given to ensuring the best outcome for the affected species and ecosystems for these reaches – for example moving the waterways back to their original course may be the best outcome, but it will mean two instances of complete loss of values from the de-watered reaches, followed by a lag time for these values to re-establish. It is unclear how this will be considered as part of the proposed compensation and mitigation of effects.

Biodiversity Project

122. OGNZL proposes a Biodiversity Enhancement and Predator Control Programme (the 'Biodiversity Project') as an *Augier* condition i.e. as noted in the condition set: 'The Biodiversity Project is a beneficial action to be undertaken voluntarily by the Consent Holder in addition to other biodiversity-related actions required by this consent. It is not required to remedy, mitigate, offset or compensate for any adverse effects of the mining activities' [58] .

123. The Biodiversity Project is intended to be collaborative project that is designed by stakeholders including DOC and tangata whenua and will be undertaken on public conservation land. However, OGNZL has so far not involved, or shared relevant details of the Biodiversity Project with, DOC. This has recently been raised as a concern by tangata whenua.[59]

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[56] Boffa Miskell "Waihi North Project: Freshwater Ecological Assessment" (26 February 2025), at B.43 at 23.1.4 - 23.1.8, pages 141 - 142.

[57] Ibid., Appendix 14, page 2.

[58] Waihi North Project – Schedule 1: Proposed conditions common to the Hauraki District Council and Waikato Regional Council resource consents (28 July 2025) at conditions C30 - 42, page 17 - 21. See also Mitchell Daysh Limited, at A.05, section 2.14, pages 191 – 193.

[59] Director-General of Conservation, n 2, at page 2.

124. Without further information, DOC is unable to comment on the feasibility of the Biodiversity Project, the appropriateness of outcomes sought or the adequacy of funding offered.

6. Planning Framework

125. Having addressed the effects of the proposed development and the proposed measures to manage those effects, the next section of comments addresses the planning framework those effects are to be considered under for the purposes of the resource consents.

126. Although the application is made under the Act, the Panel is required to take into account a range of provisions from the Resource Management Act 1991 which direct decision making,[60] with all necessary modifications.[61] Relevant planning documents under those provisions include:

    a. National Policy Statement for Indigenous Biodiversity 2023 (NPSIB)

    b. National Policy Statement for Freshwater Management 2020 (NPSFM)

    c. Hauraki District Plan

    d. Thames-Coromandel District Plan

    e. Waikato Regional Plan

    f. Waikato Regional Policy Statement.

127. Planning documents under the Conservation Act 1987 are also relevant to the areas that are on public conservation land.[62]

128. The application includes an assessment of the Resource Management Act 1991 planning framework, so that is not repeated here. Instead, our comments focus on elements of the framework that DOC considers were not adequately addressed in the application. For completeness, DOC notes it is generally happy with the applicant's assessment against the regional planning regime.

National Policy Statement for Indigenous Biodiversity 2023

129. The objective of the NPSIB is to maintain biodiversity across Aotearoa New Zealand so there is at least no overall loss in indigenous biodiversity. The objective is to be achieved by protecting

[60] Fast-track Approvals Act 2024, sch 5, cl 17(1). This includes section 104 of the Resource Management Act.

[61] Fast-track Approvals Act 2024, sch 5, cl 17(6).

[62] Fast-track Approvals Act 2024, sch 5, cl 17(1), Resource Management Act 1991, s 104(1)(c).

and restoring indigenous biodiversity as necessary to achieve the overall maintenance while providing for social, economic and cultural wellbeing of people and communities.

130. The NPSIB came into force after the Hauraki District Plan and Thames-Coromandel District Plan had mapped the Coromandel Forest Park as a Significant Natural Area ("SNA"). The definition of SNA under Clause 6 of the NPSIB includes "*any area that... is already mapped as an area of significant indigenous vegetation or significant habitat of indigenous fauna (however it is described)...*". Therefore, the NPSIB requirements for SNA protection are relevant to the proposal.

131. There are two matters in particular which DOC considers were not adequately addressed in the application.[63]

132. First, the analysis does not adequately recognise the uncertainty of effects on biodiversity. NPSIB Policy 3 requires a precautionary approach to be adopted when considering adverse effects on indigenous biodiversity. The application identifies Policy 3, but no further analysis is provided in its discussion of the NPSIB. While OGNZL states that they are taking a precautionary approach, it is not apparent in the proposed mechanisms for implementing the approach – i.e. the relevant conditions and associated management plans. As discussed in section 5 above, there are substantial uncertainties regarding effects on leiopelmatid frogs and methods of pest control. For example, the reports used to support the planning analysis state that vibration effects on Archey's frogs are largely unknown,[64] but then conclude that the effects are low.[65] Also, there is only one study that provides some understanding on how rat control can improve leiopelmatid frog populations, and conservation translocations of leiopelmatid frogs that have been undertaken previously have had a very low success rate as acknowledged by both DOC and OGNZL.[66]

133. Of particular concern is that there is a range of plans for managing ecological effects that have not yet been provided (as also addressed in DOC's section 51 reports), which leaves significant uncertainty about what those plans will contain and what ecological outcomes will be stated.

134. Second, the Project relies primarily on biodiversity offsetting and compensation to achieve its net-gain outcome, particularly through the WPAMP. OGNZL's assessment against the NPSIB focuses on the overall objective and policies yet does not consider the Appendices that provide the requirements for biodiversity offsetting and compensation.

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[63] Mitchell Daysh, "Waihi North Project - Substantive Application Report" (2025) at A.11, section 8.7.3.9, page 592.

[64] Bioresearches, above n 19, at B.39, section 5.5, page 32.

[65] Ibid., Table 7.2, page 59.

[66] OceanaGold NZ Limited "Ecology and Landscape Management Plan – Wharekirauponga Underground Mine" (3 March 2025), at H.01, section 4.2.4.1, page 18.

135. Under Clause 3.10(4) of the NPSIB, if biodiversity offsetting or compensation is applied, OGNZL must demonstrate how they have complied with principles 1 to 6 in Appendix 3 and 4; and have had regard to the remaining principles in Appendix 3 and 4, as appropriate. There are several principles within Appendix 3 that are not met by OGNZL's WPAMP and other compensation.

136. Principle 2 states that biodiversity offsets are not appropriate in situations where indigenous biodiversity values cannot be offset to achieve a net gain. Principle 2(b) provides an example as where effects on indigenous biodiversity are uncertain, unknown or little understood, but potential effects are significantly adverse or uncertain. As stated in paragraphs 34 - 37, there is little knowledge about the effects of anthropogenic vibrations on leiopelmatid frogs. The potential effects are uncertain, and due to the species' unique characteristics, could lead to a significant adverse outcome.

137. Principle 2(c) gives a further example as where there are no technically feasible options by which to secure gains within an acceptable timeframe. If the effects from the vibrations do cause significant adverse effects on the population, it is uncertain whether OGNZL could recover the gains, i.e. grow the population after the stoping activities finish, within an acceptable timeframe. As stated in paragraph 22, leiopelmatid frogs have limited ability to recover due to their slow reproduction rates, therefore it may not be possible for the population to increase to the net-gain result as anticipated by OGNZL's report. The application states that mining would likely conclude 18 years after the consent has been granted. DOC's technical advisors consider that it would take a minimum of 10 years for the species to recover. The population recovering 28 years after the exercise of the consent, which again is the minimum, is not considered to be an acceptable timeframe.

138. Principle 3 states that biodiversity offsetting should achieve a net-gain. The reports OGNZL have provided state that there will be an overall net-gain in leiopelmatid frog population numbers, but the resource consent conditions state that monitoring and pest control only need to continue until there has been a no net-loss,[67] which would be before a net-gain had been achieved.

139. Principle 5 states that biodiversity offset design and implementation should avoid displacing harm to other indigenous biodiversity in the same or any other location ("leakage"). Translocating frogs within the Wharekirauponga Underground Mine site would place them into an existing frog population, placing stress on the area's ability to provide food sources and shelters for both the existing and translocated frogs. DOC explains the issues of translocation in the section 51 Wildlife report at paragraphs 122 – 130. This could result in a net-loss for both populations, which would amount to leakage.

[67] Waihi North Project – Proposed Conditions for the Hauraki District Council Land Use Consents (28 July 2025) at condition 173, page 73.

140. Principle 6 states that any offsetting should provide a benefit 'in perpetuity'. There will be some benefit to frogs from the pest control proposal, as discussed in paragraphs 80 - 101, however there is also the risk of near constant reinvasion of pest species. Once the appropriate targets are met and the pest control stops, it is probable that the site will immediately be reinvaded by predator species. It is unlikely that unless wider pest control is undertaken, or a conservation translocation to a predator free site takes place, any net gain in biodiversity values will last longer than the life of the pest control operations.

141. There is a possibility that the Biodiversity Project could undertake additional pest control in the Coromandel Forest Park. However, OGNZL has stated that the Biodiversity Project is additional to compensation, and DOC is not aware of its details, so it cannot be relied upon to provide long-term benefit.

142. Given the above points, at this stage the proposal would not be consistent with the NPSIB principles for offsetting.

143. In terms of compensation, the research fund proffered in the resource consent conditions is considered inadequate to provide for a proper research endeavour. Research on the effectiveness of pest control on supporting Archey's frog recovery would require funding capable of fully supporting a project by a university student to ensure the best outcomes. $25,000 per year is unlikely to be sufficient to fund research that does not cover tuition related costs, research funding or a stipend. If this funding is intended to supplement a research proposal, additional provisions should be implemented to ensure how the research should be supplemented and supported. To constitute proper compensation requires the fund to be workable to achieve the outcomes that OGNZL has stated it will endeavour it to achieve, therefore DOC recommends that rather than stating a set value, the fund be described to support one or more PhD or Masters students over the duration of the stoping activities of the Wharekirauponga Underground Mine.

National Policy Statement for Freshwater Management 2020

144. Particularly relevant provisions of the NPSFM for this proposal include there being no further loss of wetland extent or values (Policy 6), and that the loss of river extent and values is avoided to the extent practicable (Policy 7). The NPSFM also includes principles for aquatic offsetting and compensation.

145. It is difficult to assess the project against the NPSFM due to the different figures in OGNZL's reports as discussed earlier in paragraphs 115 - 121. Without certainty of figures of loss and proposed gain, there is insufficient information to determine whether these provisions of the NPSFM would be met.

District planning documents

146. The Hauraki District Plan (HDP) was made operative in 2014 and includes a chapter titled "Indigenous Biodiversity and Significant Natural Areas". The chapter includes a schedule of SNAs that were mapped in partnership between Hauraki District Council and Waikato Regional Council in accordance with the requirements in the RPS.

147. Area 1 of the application occurs within several SNAs mapped in the HDP. The Coromandel Forest Park has been mapped as a Nationally Significant SNA. The status of Nationally Significant means that any activity, not otherwise covered in the chapter, that would involve vegetation clearance is a non-complying activity. This applies to the application as it includes the clearance of sections inside the Coromandel Forest Park for its drilling operations.

148. The application also has a small overlap into the Thames-Coromandel District, hence the Thames-Coromandel District Plan (TCDP) applies for that location. OGNZL has provided a set of conditions under the Thames-Coromandel District land use consent.

149. The Coromandel Forest Park has been zoned as Conservation and has an overlay of Outstanding Natural Features and Landscapes in both the HDP and TCDP. The purpose of the HDP Conservation (Indigenous Forest) Zone is to recognise and maintain the importance of the indigenous forest cover and its role in providing a sustainable ecological base. The purpose of the TCDP Conservation zone is to ensure that non-Crown activities cannot occur if they are not consistent with the WCMS and/or have a significant adverse effect beyond the boundaries. Further, any use and development that occurs should maintain or enhance the values of public conservation land. As discussed below, the activities sought do not align with the objectives and policies of the WCMS.

Conservation management strategies and policies

150. In its section 51 Access Arrangement and Concession reports, DOC provided an assessment of the activities proposed within Area 1 against the applicable conservation management strategies and policies, namely the Conservation General Policy, Waikato Conservation Management Strategy 1996 and 2014 and the Coromandel Peninsula Conservation Land Management Plan 2002. See paragraphs 127 – 148 of the Concession report, and paragraphs 154 to 166 of the Access Arrangement report. This assessment is not repeated here. In summary, DOC's conclusion is that the Willows Concession and Favona Access Arrangement are consistent with the conservation planning documents, but the Northern Concession and Wharekirauponga Access Arrangement as currently proposed are considered to be inconsistent.

151. The boundary of the WCMS 2014 extends as far south as State Highway 2 and State Highway 25 and does not include Waihi township. For those parts of the application south of the WCMS 2014 boundary the WCMS 1996 still has effect The WCMS 1996 was not considered in the DOC section 51 reports because it applies to Areas 3 (in part) – 7. The WCMS 1996 has

objectives to protect natural and historic resources regardless of whether the land is public conservation land or private land. There are two overall objectives, including the following:

> 'To preserve the health and diversity of existing indigenous terrestrial, freshwater and marine ecosystems, and maintain or increase the variety and abundance of indigenous species'.[68]

152. The works in Areas 3 to 7 will have an impact on terrestrial and freshwater species and ecosystems. To achieve consistency with the WCMS 1996, the conditions set out in the approvals should achieve at least a no net-loss outcome. The WCMS 1996 supports the need to consider alternative pest control measures and rigorous planting regimes within Areas 3 to 7.

7. Resource consent conditions

153. OGNZL and DOC have been workshopping conditions for the project to address DOC's concerns since OGNZL lodged their substantive application with the EPA. The conditions workshops were informed by ongoing technical workshops. The workshops were productive and resolved some issues, however there are still outstanding gaps that DOC wishes to raise.

154. OGNZL sent four sets of conditions for resource consents to DOC dated 29 July 2025; one for Hauraki District Council land use consents, one for the Thames-Coromandel District Council land use consents, one for Waikato Regional Council regional consents, and an overarching set of conditions that apply to both the Hauraki District Council and the Waikato Regional Council consents. DOC has based its comments on these four sets of resource consent conditions.

155. Where easily resolvable, DOC has provided red lined consent conditions at Appendix 2. However, there are a series of wider concerns that span multiple consent conditions that cannot be easily resolved. Comments on these are provided below.

Hauraki District Council leiopelmatid frog specific conditions

156. Conditions 167 – 183 of the Hauraki District Council conditions area described as "Leiopelmatid frog specific conditions". The conditions cover the Wharekirauponga Animal Pest Management Area, the Wharekirauponga Pest Management Plan, the Native Frog Monitoring Plan, reporting requirements and the proposed Archey's Frog Research Fund. These conditions are therefore critical in implementing the mitigation measures proposed by OGNZL to address residual adverse effects on native frogs.

157. In its comments above, DOC has raised a range of concerns that relate directly to this suite of conditions. These are not repeated here. DOC also provides further comments below about conditions relating to management plans which are also applicable to this suite of conditions.

[68] Department of Conservation "Waikato Conservation Management Strategy" 1 (1996) at 8.1.1, page 101.

158. Overall, DOC has concerns about how this suite of conditions are intended to work together. One key concern is the variable objectives that are stated across the proposed conditions. Specifically (emphasis added):

- **Condition 168** states that the objective of the pest management required by Condition 167 is to *enhance the habitat of leiopelmatid frogs*.
- **Condition 171B** states that the objective of the Wharekirauponga Pest Animal Management Plan (WPAMP) is to outline methods that will be used to control mammalian pests at a specified site *to address residual ecological effects associated with the Waihi North Project*.
- **Condition 173** states that the Consent Holder must continue pest control within the WAPMA in accordance with the WPAMP until the later of:

  a. Two years after the completion of stoping activities within the WUG; or

  b. Monitoring undertaken in accordance with the Native Frog Monitoring Plan required by Condition 174 shows leiopelmatid frog numbers within the WAPMA are no lower than would be expected in this area had the mining activity not occurred considering frog numbers in nearby habitat which was unaffected by blasting vibration.

- **Condition 175** states that the objective of the Native Frog Monitoring Plan is to ensure appropriate monitoring is being undertaken with regard to potential vibrations, dewatering, and pest control effects on native frogs, and to determine *whether the pest control are achieving a net gain in native frogs within the WAPMA*.

159. It is difficult to reconcile these varying objectives with each other and/or with the statements in the application that the proposed management response is expected to provide a "demonstrable net benefit" to native frogs.[69]

160. DOC considers these conditions need to be reviewed and updated to address the concerns DOC has identified.

Management plan conditions

161. OGNZL has proposed conditions for the resource consents which establish a suite of management plans. A number of these management plans are intended to apply across the conservation approvals and resource consents, i.e. the same management plans are referred to in the respective condition sets.

162. DOC's section 51 Covering Report includes a section addressing the proposed management plan conditions (see paragraphs 22 – 44). This covers general principles relating to the use of management plans and sets out DOC's concerns regarding the proposed use of management plans primarily in relation to the conservation approvals. DOC has identified various aspects

[69] Mitchell Daysh Limited, above n 8, at A.09, section 6.6.1.1, page 425.

where OGNZL's proposed approach is unclear, particularly in terms of DOC's role in amendments to the relevant management plans. DOC has identified aspects where further clarification is required from OGNZL as to their intended approach before DOC can comment on whether or not that approach is appropriate.

163. DOC's concerns relating to the use of management plan conditions for the purposes of the resource consent involve more 'orthodox' issues that commonly arise in relation to the use of such conditions. DOC's particular concern is to ensure that the conditions which establish the management plans and provide for amendments to those management plans for the life of the Project are consistent with the general principles that are set out in DOC's Covering Report. In particular, the requirement that such conditions are certain and should not leave substantive decisions to council officers, to be made after the decision on the consents themselves. Reliance should not be placed on unenforceable qualitative objectives of management plans for the management of adverse effects.

164. In DOC's view, many of the proposed management plan conditions lack certainty. For example, condition 168 of the proposed conditions for the Hauraki District Council Land Use Consents states that the objective of the pest control is to "enhance the habitat for leiopelmatid frogs". As set out above, this does not match the objective of the WPAMP in condition 171B, which is to outline methods that will be used to control mammalian pests at a specified site to address residual ecological effects associated with the Waihi North Project.

165. Condition 169 sets out the pest control management targets that OGNZL must "seek to meet" (DOC considers OGNZL should be required to meet these targets rather than merely seek to meet them). However, condition 171B that sets out the objective of the WPAMP (to outline methods), and what needs to be included in it (condition 171C), do not refer to the management targets and thresholds as set out in condition 169. Instead, condition 171C(g) would allow management targets and thresholds to be specified in the WPAMP. DOC considers OGNZL should be required to meet the targets and thresholds set in the conditions, and not those set or amended by OGNZL in the WPAMP itself.

166. Conditions 169, 171A and 171C all reference thresholds but do not include when the thresholds are triggered and adaptive management is required. If the actions required once the thresholds are triggered are not included in conditions, they are unenforceable and fail to provide for offsetting requirements.

167. Likewise, by way of further example, the objectives stated for the ELMP-WUG and its composite plans are vague and leave performance indicators to be set by the management plans rather than the conditions (see Conditions 47, 47A). There is no cross-referencing to other relevant conditions that are directly relevant to the matters to be addressed in the management plans, for example the suite of conditions in the HDC condition set that address requirements for vegetation clearance (conditions 111 – 166).

168. DOC acknowledges that most of the management plans that are relevant to DOC's interests are plans that OGNZL proposes will be 'certified' by the Panel as part of the approval process (i.e. those management plans listed in conditions C4 of the combined HDC and WRC conditions). The exception is the Native Frog Monitoring Plan, which is referred to in condition C5 of the conditions common to the HDC and WRC consents as a plan that will be certified (for the purposes of the resource consent approval) by the HDC and DOC following the Panel's decisions (discussed further below). Conditions C8 and C8A of the combined HDC and WRC conditions set out the process for amendment of the management plans for the purposes of the resource consent approvals.

169. DOC's primary concern is that the lack of certainty across a number of the management plan conditions is particularly problematic for amendments to the management plans, i.e. the fact that the plans are proposed to be 'certified' by the Panel as part of the approvals, does not alleviate the problem that uncertain management plan conditions create the risk of 'unlawful' delegation of substantive decisions to a third party, through the process proposed for amendments.

170. At paragraph 171 below, DOC has listed the management plans relevant to its interests. DOC considers that OGNLZ should be directed to review the conditions relating to these management plans and sub-management plans with the view to ensuring appropriate objective and performance indicators/standards for each management plan are provided for in the conditions. While numerical performance standards will not be appropriate for all of these plans, there are more meaningful targets that can be sought to make it easier for any certifiers to objectively confirm that the management plans are meeting the required environmental standards. This could include requirements of types of methods used that are standard requirements across the specific management plan, such as the requirement to abide by the New Zealand Fish Passage Guidelines version 2, or any subsequent amendments. DOC also considers that the conditions for each management plan need to cross-reference other relevant conditions to which the management plan relates, as this should be relevant to certification. Given the number of management plans involved, this would preferably be done by a schedule.

171. The relevant management plans are:

    a. Wharekirauponga Underground Mine Ecology and Landscape Management Plan;
        i. Terrestrial Ecological Management Plan;
        ii. Vegetation Remediation Plan;
        iii. Aquatic Fauna Salvage and Relocation Plan;
        iv. Kauri Dieback Management Plan; and
        v. Landscape and Visual Mitigation Plan.
    b. Waihi Area Ecology and Landscape Management Plan;
        i. Residual Effects Offset Plan;

ii. Planting Plan;
iii. Lizard Management Plan;
iv. Avifauna Management Plan;
v. Bat Management Plan;
vi. Aquatic Fauna Salvage and Relocation Plan; and
vii. Landscape and Visual Management Plan.

c. Coromandel Forest Park Kauri Dieback Management Plan;
d. Wharekirauponga Pest Animal Management Plan;
e. Wharekirauponga Underground Mine Water Management Plan;
f. Archaeological Management Plan;
g. Native Frog Monitoring Plan; and
h. Vibration Management Plan.

Site selection protocols, surveying requirements prior to vegetation clearance and salvage

172. As previously stated, DOC adopts the comments made in its section 51 Access Arrangement and Concession reports in relation to the outstanding issues with the site selection protocol, surveying requirements prior to vegetation clearance and salvage for the drill sites within Area 1.

173. In summary, those issues are:

- The current proposal differentiates between the 20 exploration drilling sites, the four ventilation shaft pump sites and the 50 drill rig sites. The 20 exploration sites would require an ecological survey, whereas the vent shaft/pump test sites, portable drill rig sites and water pump sites would follow the site selection protocol only. DOC's preference is that detailed ecological survey is undertaken at every drill location. If site selection protocols are to be used, they will require further refinement.
- The use of ecological surveys for the drill site locations is supported by DOC. OGNZL has suggested a 3 m minimum buffer is created from any native frog found during the ecological survey and then sites selected accordingly (HDC 159). DOC consider that this buffer should increase to 6 m. Although 3 m is within some documented average distances moved by an Archey's frog in a single night, there is also evidence of movement between 4 and 12 m from point of capture. Therefore, additional flexibility is required. If a 6 m buffer is not adopted, then OGNZL should identify the night retreat of the frog (potentially through night surveys) and ensure that the buffer includes the night

retreats. This may require an increase of the buffer for selected sites. Annual frog surveys should also be undertaken to confirm whether frogs are maintaining a territory at the site.

- When buffers are applied, it is important to ensure that 'buffered' frogs are not left separated from adjoining forested habitat. Conditions requiring the maintenance of connectivity with adjacent undisturbed habitat are supported. However, the outcome sought by the condition should be to ensure that each frog has no less than 50% connectivity, as opposed to the current reduction in habitat of 25% (HDC condition 134).
- DOC does not consider that the current site selection protocol will adequately address potential impacts on frogs or lizards. The multi-criteria assessment tool (MCA) does not contain any criteria relating to lizards, and the current criteria relating to frogs will not result in the avoidance of effects and will create adverse impacts on frogs within the "low" and "medium" categories. This is not acceptable for "Threatened" or "At Risk - Declining" species.
- There is also discrepancy within the MCA process description and the listed outcomes. The MCA does not contain exclusion criteria, which is not consistent with a desired outcome of avoiding effects on a species.
- DOC considers that there are still fundamental gaps regarding the salvage protocols within the ELMP. Frogs should be salvaged in accordance with the Native Frog Salvage and Release Plan. This plan is yet to be provided to DOC.
- The site selection protocol includes avoidance of heritage features as one of the multifactor criteria for analysis, however there are no other specific conditions included requiring any additional effects assessment to take place in relation to the man portable drill sites. Without additional knowledge of the potential impacts on the heritage features, there is an unacceptable and unmitigated risk that these features will be impacted by exploration or mining activities and associated operations, even if these could have been easily avoided. The proposed accidental discovery protocol conditions relate to actions following accidental discovery only. Given two recorded archaeological sites have been identified within the proposed drilling areas it is appropriate that

additional investigation is undertaken at the time of site selection. Assessments are therefore also required to be undertaken for the 50 portable drill sites.

- In order to avoid effects on the high heritage value of the Wharekirauponga Track, additional wording is required in the site selection protocol to require sites to be set back as far as possible from the track.

174. As recorded in DOC's section 51 reports, DOC recommends that the site selection protocol would benefit from expert conferencing to agree on the appropriate methodology to avoid, remedy and mitigate the relevant effects.

175. The section 51 Access Arrangement report and Concession report provided marked up conditions at the Panel's request. The marked-up conditions included amendments sought by DOC to the vegetation clearance conditions. The comments and amendments for the Wharekirauponga Access Arrangement (Schedule 2, conditions 2.34 to 2.90) and Northern Concession (Schedule 3, conditions 5 – 23) apply to the Hauraki District Council land use consent conditions 113 to 166 and to conditions 15 – 32 of the Thames-Coromandel land use consents.

176. DOC also notes that it is unclear whether OGNZL proposes to include the Native Frog Salvage and Release Plan as part of the ELMP-WUG for the purposes of the resource consents. In OGNZL's updated conditions set for the Wildlife Approvals, Schedule 3, condition 2 sets out that the management plans in accordance with which the activities must be undertaken as including: "*The Native Frog Salvage Release Plan as included in the Wharekirauponga Underground Mine Ecology and Landscape Management Plan*." In its section 51 Access Arrangement and Concession reports, DOC noted that this plan also needed to be included in the conditions sets for the Wharekirauponga Access Arrangement and Northern Concession.[70] Condition 47A of the combined HDC and WRC conditions does not list the Native Frog Salvage Release Plan as one of the sub-plans to be included within the ELMP-WUG and the HDC conditions requiring salvage and release still refer generally to 'procedures in the ELMP-WUG',[71] rather than specifically to the Native Frog Salvage Release Plan. Clarification from OGNZL is required.

Draft management plans

177. The Covering Report for DOC's section 51 reports addresses the draft management plans. As noted, while DOC has provided feedback to OGNZL on a number of the draft management

[70] Director-General of Conservation "Appendix F - Access arrangement report" (11 August 2025), Appendix 2, Wharekirauponga Access Arrangement conditions, comment A11; Director-General of Conservation ' Appendix C – Concession report; (11 August 2025); Appendix 1, Northern Area Concession Conditions, comment A11

[71] See for example Waihi North Project – Proposed Conditions for the Hauraki District Council Land Use Consents (28 July 2025) at conditions 144 and 163.

plans submitted with the application, DOC has not been provided with further updated drafts of these plans. In its comments above, DOC has referred to specific aspects of the management plans. However, DOC considers it will need the opportunity to comment on any further revisions of the relevant management plans, noting in particular that the proposal is for the majority of the management plans that are relevant to DOC's interests to be approved (or certified) by the Panel as part of its decisions.

Jenni Fitzgerald
Fast Track Applications Manager

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

Date: 25 August 2025

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

Appendix 1: Comments on Resource Consent Conditions

As mentioned in the s532 comments and section 51 Covering Report, DOC considers there are matters where further engagement is need with the Applicant and/or other participants before DOC can propose alternative drafting.

The comments provided in this Appendix are the 'quick fixes' that DOC can provide to assist the Panel in resolving minor concerns that DOC has. Note that the majority of the substantive comments raised in DOC comments relate to the HDC conditions, and therefore no further specific matters are addressed below.

DOC intends to provide additional comments when the Panel produces a set of draft conditions under s 70 of the Act.

All additions proposed by DOC are in red and underlined, and all deletions proposed are in ~~red and struck-through~~.

Common conditions to Hauraki District Council and Waikato Regional Council consents

1. **Condition C5** states in its advice note that DOC must also certify the Native Frog Monitoring Plan. DOC assumes that this implies DOC will certify the Plan for the purposes of the resource consent conditions. However, if so, that should be stated as a condition, not an advice note. Clarification from OGNZL is required.
2. **Conditions C8 – C8D** are the conditions that set out DOC's input into certain management plans under the consents. As stated in the Covering Report for DOC's section 51 reports at paragraphs 28 – 31, DOC's role for amendments to the management plans for the purposes of the conservation approvals is unclear. Clarification is required to determine whether conditions C8 – C8D adequately provide for DOC's input.

Thames-Coromandel District Council land use consents

1. **Condition 11** makes a broad statement that the utilisation of the portable drill rig sites shall adopt best practice and minimise associated impacts on the environment to the extent practicable. It does not include what is considered best practice and 'minimise associated impacts on the environment' is vague to the point where it is does not provide any clarification on how the impacts will be managed. The condition should be **deleted**.

   ~~*The utilisation of portable rigs must adopt best practice and minimise associated impacts on the environment to the extent practicable.*~~

2. There is a condition between condition 13 and 14 that states “vegetation clearance, construction or operations at any” before cutting off. It is an incomplete condition. It is assumed that it is supposed to be a mirror of the requirement laid out in the Hauraki District Council consents and therefore the following recommendation is proposed:

> *Vegetation clearance, construction or operations at any portable drill rig site in Area 1 must not commence until the corresponding Site Siting Report is certified pursuant to condition 13 (c).*

3. **New condition** as there is no section 128 review condition in the Thames-Coromandel consents that provides the opportunity to the Council to review the effectiveness of the consent to avoid, remedy, or mitigate any adverse effects on the environment. A condition, similar to the condition in the Hauraki District Council consents is proposed with amendments to acknowledge that the intensity of the activities provided under the consent is less significant than the Hauraki District Council consents.

Waikato Regional Council consents

1. **Condition G7** states that refuelling and lubrication activities must be carried out ‘a distance’ from any water body, ephemeral water body, or overland flow path, that is sufficient to ensure that any spillage can be contained and not enter surface water. It is recommended that a minimum distance is specified to avoid adverse effects on nearby waterbodies in case of a spill.
2. **Condition G12** describes the minimum information required to be included in the Chemical Treatment Plan but does not include procedures for storing and transporting chemicals on site, or spill contingency measures, trigger limits for monitoring, or measures to be undertaken in the event that monitoring identifies trigger level exceedances. The condition should be amended to include these matters.
3. **Condition G13(a)** should be amended to ensure the Site Specific Erosion and Sediment Control Plan must be prepared by a suitably qualified person with experience in erosion and sediment control.
4. **Condition G19** states that the consent holder must develop 2,765 metres of new stream channel with ecological functionality in the areas shown in the ELMP referred to in Condition C4 of the conditions common to the Hauraki District Council and Waikato Regional Council consents. The term ‘ecological functionality’ should be clearly defined, or another defined term used, in the consent conditions as it is currently uncertain and unenforceable. Instead, OGNZL should put forward indicators of health, such as percentage of habitat or certain number of freshwater fauna species surveyed within a period of time. **(d)** also refers to “the new stream channel required by (d) above”. This should be amended so that reference is to (c).
5. **Condition G19** also outlines the ecological offsets that must be carried out by the applicant. These offsets need to be protected in perpetuity in a covenant or other legal form of protection.

As discussed in section 4, there is a real risk that the offset area is disturbed again like TB1 is proposed to be, and any benefit gained from the offsetting is lost.

6. **Condition G30** describes the objective of the Waihi Area Water Quality Management Plan. The objective of the plan should be to ensure that the trigger levels specified in conditions are not exceeded, and to confirm any adverse effects are no greater than anticipated. The information requirements for the plan should include methods to be used to achieve compliance with consent conditions, procedures for monitoring effects, recording and reporting requirements, and contingency measures if unanticipated effects are identified or trigger levels are exceeded.

   If limits are not included in conditions, this creates uncertainty as to the degree of effect that will be considered acceptable. Similarly, conditions that state effects should be minimised or mitigated, but do not identify specific limits or measurable outcomes, create uncertainty and are difficult to enforce due to their subjectivity. It is requested that OGNZL provide limits and trigger levels for the Council to be able to determine.

7. **Condition UG.4** requires the consent holder to "*avoid greater than minor effect on shallow groundwater which will or is likely to adversely affect any surface water body".* The meaning of "greater than minor effects" needs to be defined in the conditions so that it is measurable and the conditions are enforceable or alternative wording is required.

   The comments on condition UG.4 also applies to conditions SC2.F.30 and SC5.D.5.

8. **Condition UG.16** states the consent holder shall ensure that the effects of any discharge of groundwater for mitigation purposes does not cause harm to the aquatic life of the receiving environment. UG.17 then states that prior to discharge, sampling of the groundwater for specified contaminants must be undertaken to confirm that groundwater quality in that bore can be discharged in a manner which will comply with Condition UG.16. To make these conditions more certain, measurable and enforceable, the conditions should specify maximum acceptable contaminant concentrations in groundwater discharge to ensure no harm to aquatic life or the receiving environment. Alternatively, the conditions should identify the specific standards or guidelines that will be employed when determining what equates to no harm.

9. **Condition UG.19(b)** requires actions if deviations from expected natural parameters of natural state waterbodies and/or natural inland wetland have the potential to give rise to "more than minor" adverse changes in the flow regimes and/or water levels of natural state waterbodies and/or natural inland wetlands which are inconsistent with achieving Condition UG.7. Condition UG.7 states that the mining activities authorised by this consent must not cause the natural flows of any surface water body identified as a Natural State Water Body (in the Waikato Regional Plan and identified as being potentially affected by mining activities in the Wharekirauponga Hydrology Modelling report prepared by GHD Limited, dated 27 January 2025) to fall below the relevant Respond Trigger Levels set out in Condition UG.10.

10. It is recommended that UG.19 refer to the respond trigger levels in Condition UG.10 rather than referring to "*more than minor adverse changes in the flow regimes and/or water levels of natural state waterbodies and/or natural inland wetlands which are inconsistent with achieving Condition UG.7*" as adherence to the trigger levels is certain, measurable and enforceable.

11. **Condition UG.21(c)** refers to appropriately avoiding or remedying any more than minor reductions in the expected natural parameters of the natural state waterbodies and/or natural inland wetlands. This condition should be amended as it is not clear what would be considered "more than minor reductions".

12. **Condition UG.31** should be amended so that the role of the Expert Groundwater Management Panel includes the review and provision of recommendations on any Compliance Trigger level Adjustment Report prepared under Condition UG.29.

13. **SC2.F.X New Condition** should be added requiring that once the rock stack is no longer in use, Tributary 2 must be rehabilitated to ensure the waterway created has better ecological values than the current situation, and provide offsetting or compensation for the loss of over the 10 years and lag in recovery (i.e. time for habitat to reestablish and species to colonise) after the waterway is reinstated.

14. **Condition SC2.F.19** states the Consent Holder must set trigger levels for the parameters annexed as attachment to this consent for down gradient bores based on the trends observed in the monitoring data at levels which will provide early warning indicator of potential changes of groundwater quality as a result of the activities authorised by this consent. The requirements for setting trigger levels should be more clearly defined prior to consent being granted. For example, trigger levels should be set at no more than an X% increase in contaminant concentrations or no more than X% of the MAV set in the Water Services (Drinking Water Standards for New Zealand) Regulations 2022. Alternatively, the condition should require that trigger levels are approved by Council.

    The comments on condition SC2.F.19 also apply to conditions SC5.G.21, SC5.O.9, SC6.G.23, SC6.J.9 and SC7.H.26.

15. **Condition SC2.F.22** specified the requirements for classifying "Waste Rock" in the Willows Rock Stack Monitoring and Management Plan. "Waste rock" should be defined prior to a decision being made on whether to grant consent.

    The comments on condition SC2.F.22 also applies to conditions SC5.G.24. and SC6.G.26.

16. **Condition SC2.F.24** states objectives of specified plan include setting out details of monitoring undertaken to ensure the facility does not adversely affect land, ground and groundwater. The meaning of "adversely affect" should be defined in the conditions in a way that is certain, measurable and enforceable. It is noted that there is likely potential for at least some degree of

adverse effect on land and groundwater as a result of activities and this should also be considered when finalising this condition.

The comments on condition SC2.F.124 also apply to SC5.G.26, SC5.O.13, SC6.G.28, SC6.J.12, and SC7.H.10.

17. **Condition SC2.H.5** only refers to fish passage for climbing species. This condition should be amended to include fish passage for all fish species.

18. **Condition SC2.J.5** refers to "a significant adverse environmental effect on…". "Significant adverse environmental effects" should be defined so that this condition is certain and measurable.

The comments on condition SC2.J.5 also apply to conditions SC7.I.6 and SC6.H.6.

19. **Condition SC5.D.5** requires monitoring of the Gladstone Wetland vegetation and hydrological conditions that sustain it at five yearly intervals. Monitoring at this frequency could allow for irreversible effects to occur before they could be identified by monitoring. It is therefore recommended that monitoring is undertaken at a more frequent rate or using a different method of monitoring such as continuous water level monitoring that is tied into potential effects such as vegetation change and only requires the applicant to respond if water levels dropped below a given trigger level.

20. **Condition SC5.G.6** requires monitoring of groundwater down-gradient of any storage pad for potentially acid forming material stored outside the footprint of the GOPTSF. The condition should be amended to require that the monitoring location(s) must be to the satisfaction of the Waikato Regional Council. The condition should also specify trigger levels and responses required if these are exceeded.

The comments on condition SC2.G.6 also applies to condition SC6.G.9, which does not currently require downgradient monitoring, and to condition SC7.H.9, which requires monitoring but does not require approval from Council or details on trigger levels and responses.

21. **Condition SC5.O.5** should require drains constructed for purpose of conveying run-off and leachate from PAF stockpiles to collection pond(s) and Water Treatment Plant are adequately sized to convey all run-off and leachate. This also applies to Condition SC6.J.6**.**

22. **Condition SC5.O.10** should be amended as follows:

> *"At any time if monitoring results within the monitoring bores exceed ~~differ from~~ the relevant trigger level for that bore over two consecutive quarterly readings then the Consent Holder must:…"*

The comments on condition SC5.O.10 also applies to Condition SC6.J.10.