

Memorandum

To: Bendigo-Ophir Gold Project Expert Panel

From: Matakanui Gold Limited

Date: 17 August 2026

Re: Response to Question 10 RFI 11 – Ecology - Lizards

RFI 11 Question 10: Alternative Approaches for Managing Effects on Lizards

On the basis of the evidence of:

a. Dr Tocker that long-term survival rates of relocated lizards are likely to be very low (the expectation of low or no survival was supported by the Applicant's ecologists);

b. No reliable means by which survival can be measured;

c. Expected salvage costs in the vicinity of "tens of millions of dollars" for the relocation of the 102,000 lizards;

d. General expert agreement that the area and habitat types of the currently proposed enclosures are not sufficient to address the effects on lizards (paragraphs 130 of the JWS on lizards and 79 of the JWS on effects management);

e. The existence of peer reviewed research verifying that lizard populations can double in pest-free environments;

please advise what consideration has been given to other alternative approaches? For example, substantially larger pest exclusion fenced areas and/or alternative locations than currently proposed.

Introduction

MGL acknowledges the matters raised by the Panel and the ecological experts regarding:

- The uncertainty associated with large-scale salvage and relocation of lizards;
- The difficulty of measuring long-term survival following relocation;
- Evidence that implementation of a full-scale salvage programme may involve substantial cost;
- The expert consensus that the currently proposed sanctuaries, on their own, will not be sufficient to fully address residual effects; and

- Evidence that significant increases in lizard populations can occur where mammalian predators are excluded or intensively controlled.

MGL and the relevant experts have considered a range of alternative approaches to lizard salvage and relocation and residual effects management throughout project development and has continued to review those approaches in light of the evidence presented during the hearing process. This memorandum responds directly to the Panel's question on alternative approaches.

Salvage and relocation

Approach taken

In terms of the proposed salvaging and relocation programme, MGL's ecological experts considered it appropriate that a comprehensive (but not full scale) programme was warranted because:

- Some relocated individuals would be expected to survive at a release site based largely on professional opinion and circumstantial evidence from short term radio-tracking studies of translocated or relocated species elsewhere (e.g. Baber *et al.* 2015) of different species; and
- A comprehensive (but not full scale) salvage and relocation programme was technically feasible and constituted a concerted effort and would go some way towards alignment with DOC salvaging and relocation principles and legal requirements under the Wildlife Act.

As indicated in the JWS for lizards and other documentation, all experts agree that a different approach should be adopted to salvaging and relocation which targets the two At Risk species (Kawarau gecko and southern grass skink) and which focuses on better outcomes for relocated individuals through release into predator exclusion fenced sanctuaries.

Importantly, MGL did consider substantially larger predator-exclusion sanctuaries and alternative sanctuary locations during project development. Those options were assessed alongside large-scale salvage and relocation, predator control, habitat enhancement, mine rehabilitation and investment in existing conservation initiatives.

In assessing these alternatives, MGL considered not only the potential ecological benefits of each option but also the degree of certainty that outcomes could be delivered and maintained over the long term. Key considerations included land availability and tenure, long-term management obligations, legal protection mechanisms, prospectivity, practical implementation constraints, funding

requirements, and the ability to secure enduring conservation outcomes beyond the life of the Project.

MGL has also reviewed whether aspects of the proposed lizard management package should be refined in response to the hearing evidence and the matters raised by expert witnesses. The principal alternatives considered in terms of salvage and relocation and residual effects management, the reasons for selecting the preferred approach, and the refinements now proposed in response to the hearing evidence are outlined below.

Alternative approaches considered but ruled out

Salvage and relocation alternatives considered, but ruled out, are set out below.

1. Full-scale salvage of all lizards within the Direct Disturbance Footprint (DDF)

A full salvage programme targeting the ca. 600,000 lizards potentially affected by development was considered during project development.

However, this was ruled out due to the:

- Technical and resource constraints of salvaging and relocating this number of lizards, which while feasible, is practically difficult;
- Absence of evidence that a full-scale lizard salvage and relocation programme would materially reduce the severity of effects, and correspondingly conservative position that it does not; and
- Inability to demonstrably determine success based on a lack of ethically and culturally appropriate permanent marking techniques to distinguish relocated from resident individuals.

2. Salvage of lizards into the predator exclusion fence sanctuaries.

Salvaging and relocation of lizards only into the proposed predator exclusion fences was considered and ruled out on the basis that the fences are insufficient in terms of size and habitat availability. Only a small proportion of impacted Kowarau gecko could be relocated to the pro-offered Bendigo and Ardour sanctuaries:

- MGL experts consider that only ca. 3% of the Kowarau gecko or McCann's skink present in the footprint could be appropriately relocated without compromising resident lizards via over-crowding; and
- No southern grass skink could be relocated as there is essentially no suitable habitat to support this species within these sanctuaries.

3. No salvage and relocation

Doing nothing was considered and ruled out, because this option was the furthest removed from DOC standard practice and compliance with legal requirements under

the Wildlife Act (1953) and ethical standards applied by ecologists to development projects.

Residual effects management

Approach taken

Throughout project development, MGL and relevant experts have considered a range of residual effects management options for reducing the magnitude of net loss outcomes on lizards and has continued to review those approaches considering the evidence presented during the hearing process.

For the proposed residual effects management programme, MGL's ecological experts considered mammalian predator exclusion fences to be the best option for demonstrably addressing residual effects on lizards and the proposed Bendigo and Ardgour sanctuary sites to be the best of the available options considered by MGL at the time of lodgement.

The principal residual effects management alternatives considered during project development, and the reasons they were not adopted at the time of lodgement, are set out below.

1. Larger Predator-Exclusion Sanctuaries

MGL and its ecological advisors recognised that larger predator-exclusion sanctuaries had the potential to provide significant benefits for lizard populations where suitable habitat was available and predator exclusion could be maintained over time. For that reason, a number of larger sanctuary configurations and alternative locations were investigated during project development.

Several sanctuary configurations and locations were investigated during project development, including opportunities on both Bendigo Station and Ardgour Station. At the time of lodgement, those options were not progressed due to a range of considerations including land tenure, implementation practicality, mine design uncertainty, long-term management obligations and the ability to secure enduring conservation outcomes.

As a consequence, MGL concluded, at the time the application was lodged that the Bendigo and Ardgour sanctuary sites represented the most practicable and deliverable options available while still achieving meaningful biodiversity outcomes and enabling long-term management certainty.

2. Alternative Locations for Predator-Exclusion Fencing

Alternative locations were also considered on Bendigo and Ardgour Stations. These locations were investigated during earlier stages of project development but were not pursued for a combination of reasons including uncertainty regarding the final mine footprint during project design, accessibility and constructability constraints, heritage considerations, long-term management practicality, proximity to mining activity (potential noise, light, dust and vibration effects) and the availability of sites where secure ownership or long-term management arrangements could be achieved.

As project design matured, MGL concluded that the Bendigo and Ardgour sanctuary locations represented the most practicable and deliverable options available to MGL while providing long-term certainty of management and protection. It was recognised that the collective size of these sanctuaries and the absence of suitable habitat for southern grass skink was insufficient for achieving no loss outcomes.

3. Supporting Existing Sanctuaries Elsewhere

MGL also considered directing compensation funding toward existing sanctuaries and protected areas elsewhere in Otago and the wider region.

Examples discussed during the hearing included established predator-free sanctuaries and conservation programmes where threatened lizard species are already being managed successfully.

MGL's approach was also directed by the offset and compensation principles in the National Policy Statement for Indigenous Biodiversity 2023, which favour addressing residual adverse effects as close as practicable to the area affected and through like-for-like (ecologically equivalent) outcomes.

In assessing these predator exclusion fence options, MGL considered not only the potential ecological benefits of each option but also the degree of certainty that outcomes could be delivered and maintained over the long term. Key considerations included land availability and tenure, long-term management obligations, legal protection mechanisms, prospectivity, practical implementation constraints, funding requirements, and the ability to secure enduring conservation outcomes beyond the life of the Project.

MGL's Response to the Hearing Evidence

The evidence presented during the hearing raised legitimate questions regarding the effectiveness of large-scale salvage and relocation of very large numbers of lizards and the need for a more comprehensive residual effects management package. MGL has carefully considered that evidence, together with the opinions of its ecological advisors and the ecological experts participating in the hearing process.

To this end, MGL considers there is merit in redirecting resources toward actions that provide the greatest likelihood of delivering enduring conservation benefits for lizards and their habitats.

Accordingly, and in broad terms, MGL proposes a refined package of measures comprising:

- Replacement of the proposed Ardgour sanctuary with the larger Battery Hill sanctuary;
- Targeted salvage and relocation of the nationally and regionally At Risk Kowarau gecko and southern grass skink into the Bendigo and Battery Hill sanctuaries;
- Replacement of the broadscale large numbers of lizard salvage and relocation to non-fenced areas within the ARA, with an overall smaller release number into the more secure sanctuaries only;
- Retention of all other aspects of the proposed ecological rehabilitation and residual effects management package that are expected to benefit lizards; and
- Retention of long-term monitoring and adaptive management.

Sanctuaries

In response to concerns raised by experts regarding the quality of habitat available within the proposed Ardgour Sanctuary and the overall suitability of the sanctuary package for lizard conservation outcomes, MGL proposes replacing the Ardgour sanctuary with a new predator-exclusion sanctuary at Battery Hill.

The proposed Battery Hill sanctuary would encompass approximately ca. 52 hectares, compared with ca. 38 hectares proposed for the Ardgour sanctuary.

Battery Hill provides several ecological advantages in the context of lizard management, including:

- A larger overall sanctuary area;
- Inclusion of ca. 4 hectares of wetland and riparian habitat associated with Rise and Shine Creek, providing habitat suitable for relocated southern grass skink

and ca. 48 ha for relocated Kowarau gecko that is secure from introduced mammalian predators;

- Existing populations of Kowarau gecko and southern grass skink, which are expected to recover considerably in the absence of introduced predatory mammals;
- Habitat suitable for a range of other indigenous flora and fauna values;
- Proximity to sources of habitat material that may be used for habitat enhancement and restoration; and
- A location that can largely be accommodated within the DDF and consented project area, providing a high degree of certainty regarding implementation and long-term management.

Importantly, the proposed Battery Hill sanctuary responds directly to one of the principal concerns raised through the hearing process by providing suitable habitat for southern grass skink, which is not available within either the Bendigo or Ardgour sanctuary sites.

MGL acknowledges that portions of the proposed Battery Hill sanctuary will be closer to mining activities than the Ardgour sanctuary, the key reason for ruling this sanctuary out during earlier optioneering when the mine footprint boundary was less certain.

However, MGL and relevant experts now consider the potentially negative ecological effects of this can be appropriately managed without materially compromising the positive ecological benefits associated with the proposed change. These benefits relative to Ardgour sanctuary, include the provision of higher-quality and more diverse lizard habitat, improved suitability for southern grass skink and increased overall sanctuary area.

Although the Ardgour sanctuary would no longer be established, ecological management at its previously proposed location would continue in accordance with the Ardgour Restoration Area Management Plan (ARAMP).

MGL considers the revised sanctuary package comprising the Bendigo Sanctuary (ca. 29 ha) and Battery Hill Sanctuary (ca. 52 ha) provides a more effective and deliverable response to the concerns raised through the hearing process while maintaining a high degree of certainty regarding implementation and long-term management outcomes.

Subject to approval of the revised sanctuary package, the Matakanaui Sanctuary Management Plan (MSMP) will be amended to replace references to the Ardgour sanctuary with the Battery Hill sanctuary and to incorporate all associated predator exclusion, habitat enhancement, species management, monitoring and adaptive management requirements applicable to the revised sanctuary network. The revised

MSMP will provide the primary management framework for implementation, monitoring, reporting and adaptive management of the sanctuary package over the life of the Project.

The location of the proposed Battery Hill sanctuary relative to the consent area, DDF and existing sanctuary locations is shown in Figure 1.

Outcomes for lizards with the inclusion of the Battery Hill sanctuary will be improved because:

- Previously, no salvaged lizards were proposed to be released into the sanctuary areas. Proposed releases into sanctuaries that are predator-free likely provides a better outcome for individual lizards salvaged from the DDF. The assumption of improved outcomes is predicated on the assumption that lizards salvaged and released into non-sanctuary areas will have poor survival outcomes (as has been stated by DOC experts in conferencing and at the hearing);
- The proposed Battery Hill sanctuary site supports ca. 4 ha of southern grass skink habitat, with environmental conditions (damp soils, wet margins) preferred by grass skink. Habitat quality and the carrying capacity of southern grass skink is expected to significantly improve following the removal of browsing and predation pressure;
- The proposed Battery Hill sanctuary could support the release of 200 salvaged grass skinks per hectare, meaning that up to 800 grass skinks could be released into this site. That constitutes an estimated 8 % of the population within the DDF based on the predicted population of 9,000 southern grass skinks within the DDF; and
- For Kowarau gecko, the proposed Bendigo and Battery Hill sanctuaries could support the release of 100 geckos/ ha, meaning that around 7,700 geckos could be released, which constitutes around 5 % of the population within the DDF based on the predicted population of 160,000 Kowarau gecko within the DDF.

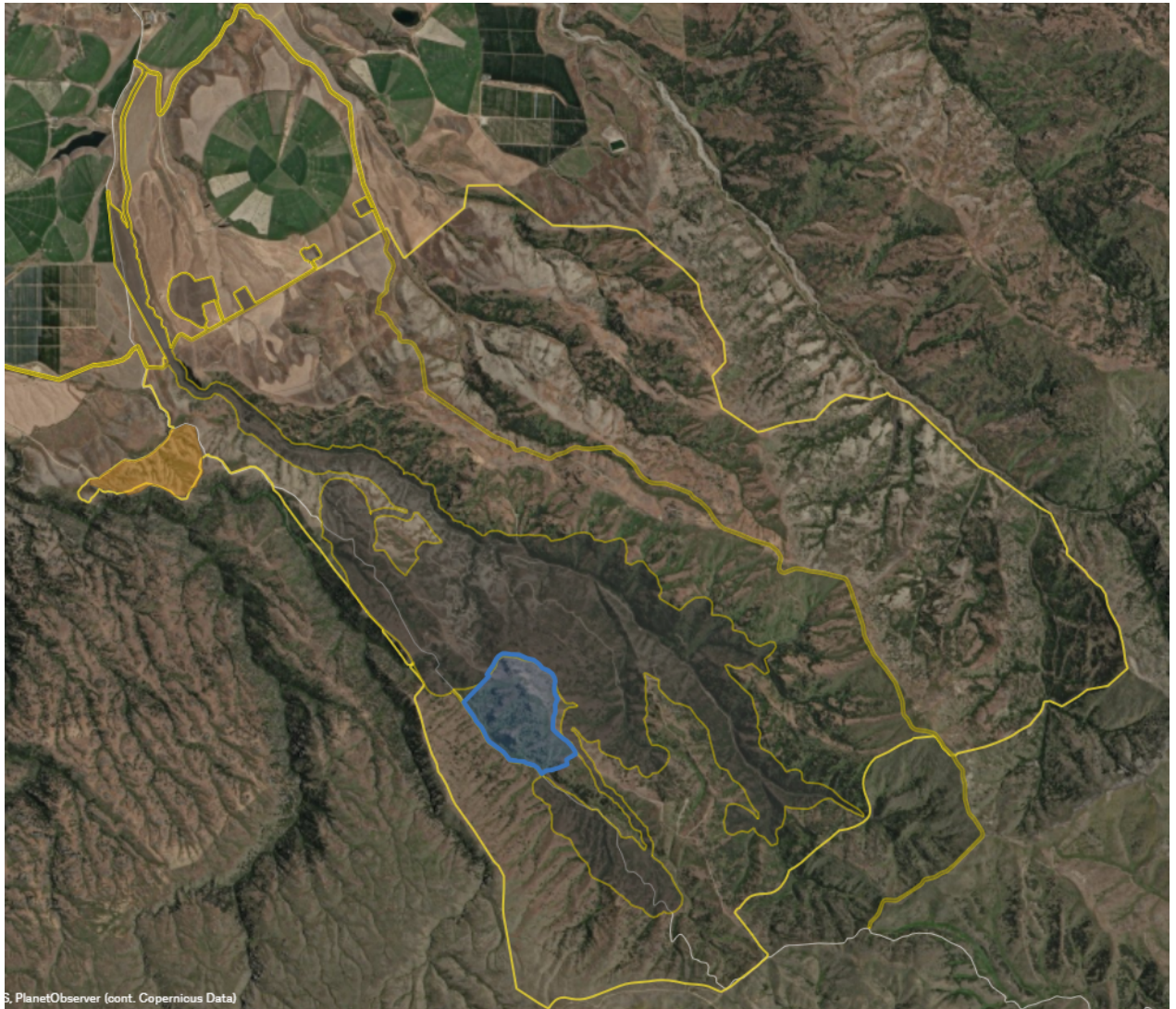


Figure 1 – Location of proposed Battery Hill Sanctuary (blue) in relation to the Bendigo Sanctuary (orange), Direct Disturbance Footprint (DDF) (grey with yellow outline), and consent boundary (thick yellow line).



Figure 2: Proposed Battery Hill Sanctuary showing southern grass skink habitat and Kowarau gecko habitat.

Targeted Salvage

The hearing evidence also raised questions regarding whether increasingly intensive salvage efforts directed toward all lizard species would necessarily result in proportionately greater conservation outcomes.

Having considered that evidence, MGL proposes that salvage efforts be focused principally on the national and regionally At Risk Kowarau gecko and southern grass skink.

All experts agreed that a focus on salvaging and relocating Kowarau gecko and southern grass skink into mammalian-predator free environments will likely generate a better outcome relative to effort. This is because these species are nationally At Risk and effects management is, therefore, of higher priority relative to McCann's skink which is classified as Not Threatened. Moreover, while uncertainties exist, relocation into mammalian predator-free environments is expected to improve the likelihood of individual survival relative to release into areas less intensively managed for mammalian predators, i.e. the Ardour Restoration Area as previously proposed. That said, it is unclear if this will generate a better outcome for lizards overall. While individual lizards will be more likely to survive when released into predator exclusion

fences, there will be significantly less lizards salvaged and relocated compared to the original proposed. Specifically:

- Approx 24% of Kowarau lizards (7,700 versus 32,500);
- Approx 44% of southern grass skink (800 versus 1,800); and
- No McCann's skink (0 versus 76,800).

Salvage methods would target areas within the DDF known to have high densities of:

- Kowarau gecko (e.g. tors or boulderfields) that can readily be captured via manual searching (e.g. turning over of boulders) and ACO checks;
- Southern grass skink that can be readily captured via pitfall and funnel trapping;
- The salvage works would proceed only for as long as is needed to reach the target numbers for each species to be relocated, which is 800 grass skinks, and 7,700 Kowarau geckos. Once that target is reached, no further individuals of those species will be relocated; and
- Any McCann's skinks caught will be released at their capture locations within the DDF, as there is no intention of transferring McCann's skinks to any other location.

A total of 7,700 Kowarau gecko will be salvaged and released into the ca. 29 ha Bendigo Sanctuary and ca. 52 ha Battery Hill sanctuary. This equates to:

- An estimated 5% of the approximately 160,000 Kowarau gecko in the footprint; and
- A stocking density of 100 Kowarau gecko per ha of suitable habitat (all habitat except the ca. 4 ha of southern grass skink habitat is deemed suitable). This corresponds to an estimated 40% increase in numbers relative to the existing resident population (based on the average density of Kowarau gecko in the ESA assumed to be ca. 262 per ha). However, the percentage increase in Kowarau gecko density resulting from the relocation is likely to be lower because the habitat within the predator exclusion fence is of high quality and likely to harbour higher densities.

A total of 800 southern grass skink will be salvaged and released into the ca. 4ha of suitable habitat within the ca. 52 ha Battery Hill sanctuary. This equates to a stocking density of 200 southern grass skink per ha across the ca. 4 ha of available southern grass skink habitat present inside the sanctuary.

MGL considers this approach better aligns available resources with actions most likely to improve the long-term viability and resilience of populations of conservation concern.

Ongoing Management and Monitoring

The revised proposal recognises that long-term conservation outcomes will depend not only on salvage and relocation, but also on the quality, security and ongoing management of receiving habitats.

The proposed Bendigo and Battery Hill sanctuaries will be subject to ongoing predator exclusion, habitat restoration, habitat enhancement, monitoring and adaptive management. These requirements will be secured through amendments to the Matakanui Sanctuary Management Plan (MSMP) and relevant conditions, which will incorporate the Battery Hill sanctuary and will set out the implementation, monitoring, reporting and adaptive management requirements for the revised sanctuary network.

Habitat enhancement within the proposed Bendigo and Battery Hill sanctuaries will be undertaken prior to lizard releases, and lizard relocations will only occur into areas where the required habitat enhancement and predator management measures have been implemented.

Habitat enhancement will commence as early as practicable following approval of the Project and will continue through sanctuary establishment and operation. Activities will include deployment of salvaged habitat materials, construction of refugia, weed management, restoration planting and other measures intended to improve habitat quality and carrying capacity.

Monitoring programmes will continue throughout the life of the Project and will be used to assess ecological outcomes and inform adaptive management responses where required.

Where monitoring identifies opportunities to improve outcomes, MGL will review and refine habitat enhancement, predator management and release strategies.

Conclusion

In response to the hearing evidence and the alternatives identified by the Panel, MGL has reconsidered the relative contribution of large-scale salvage, predator exclusion, habitat restoration and long-term conservation management for lizard conservation.

While MGL considered substantially larger sanctuaries and alternative sanctuary locations during project development, those options presented practical challenges associated with land tenure, prospectivity, implementation certainty and long-term management responsibilities.

Having reviewed the hearing evidence, MGL proposes a revised package comprising:

- Bendigo Sanctuary (ca. 29 ha);
- The new Battery Hill sanctuary (ca. 52 ha) to replace the Ardgour sanctuary (ca. 38 ha);
- Targeted salvage of priority species - nationally and regionally At Risk Kowarau gecko and southern grass skink;
- No salvage and release of lizards beyond targeted numbers for release into Bendigo and Battery Hill sanctuaries; and
- No salvage and relocation of lizards into the Ardgour Restoration Area, however, all other ecological enhancement measures outlined in the Ardgour Restoration Area Management Plan will continue.

The revised sanctuary network and associated management measures will be secured through amendments to the MSMP and associated ecological management plans, providing a clear implementation, monitoring and adaptive management framework over the life of the Project.

MGL experts (Matt Baber, Graham Ussher, Keith Barber) consider that the revised package will generate better outcomes for lizards than that previously proposed. MGL experts do not, however, contend that these refinements will materially reduce the magnitude of no net loss. Rather, experts consider the residual magnitude of net loss for lizards will remain High, albeit at the lower end of that category than the effects management package proposed at lodgement.