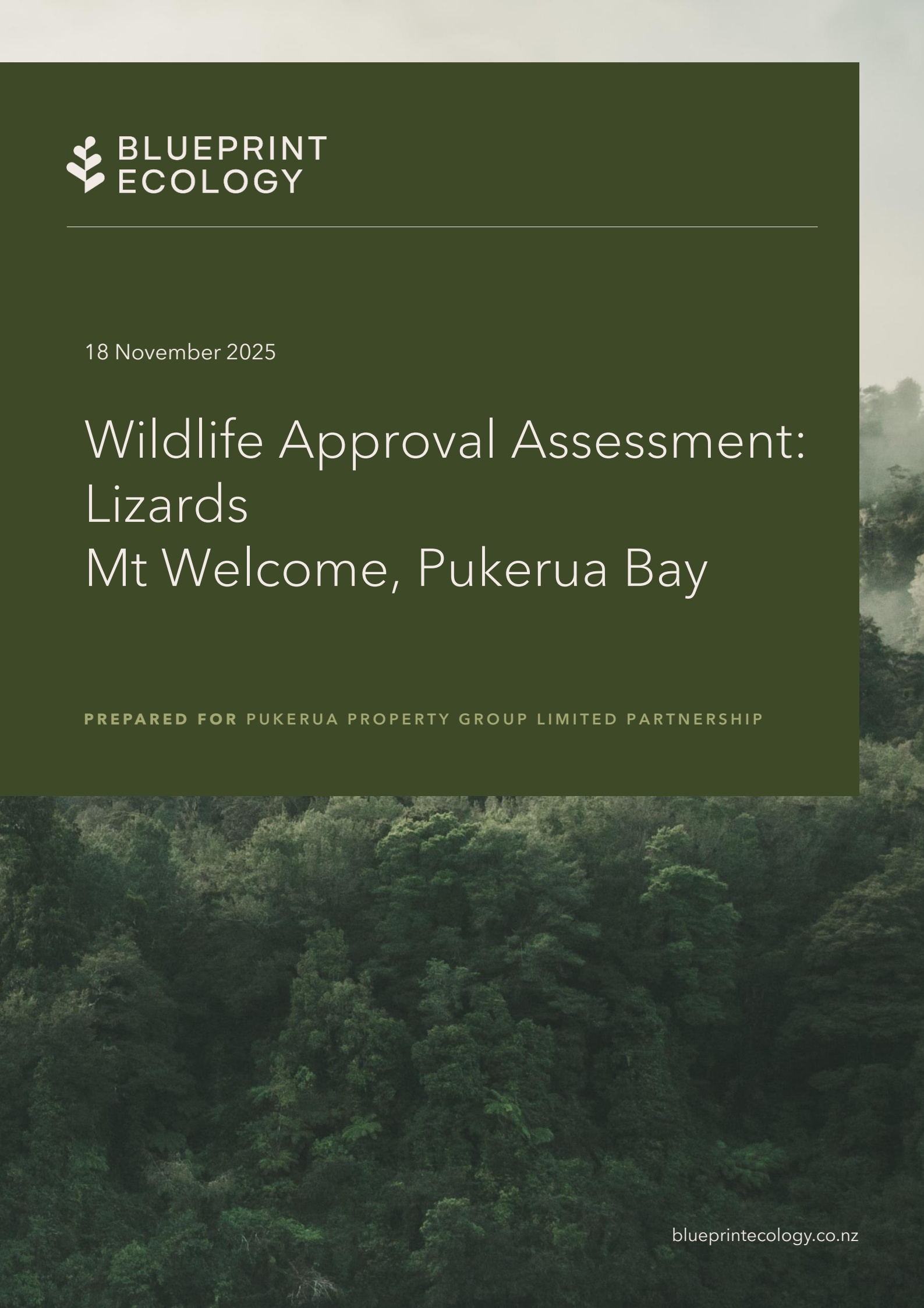
BLUEPRINT ECOLOGY

18 November 2025

Wildlife Approval Assessment: Lizards
Mt Welcome, Pukerua Bay

PREPARED FOR PUKERUA PROPERTY GROUP LIMITED PARTNERSHIP



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Introduction

The Mt Welcome, Pukerua Bay, Porirua project is to construct a staged residential subdivision to create 950 lots including associated infrastructure at 422 State Highway 59, Pukerua Bay, Porirua (the site) (**Figure 1**). The 'project' involves:

- a 949 residential allotments
- A commercial centre;
- Associated infrastructure including wastewater (including wastewater storage facilities), stormwater, water reticulation, roading, and pedestrian and cycling trails;
- Earthworks to establish the required finished surface levels for building platforms, roading, parks and drainage;
- Landscaping; and
- New intersection with State Highway 59.

Blueprint Ecology Ltd was engaged to provide specialist ecological advice with respect to the management of lizards to avoid, minimise or remedy and if possible and appropriate, offset or compensate more than minor residual impacts. A Lizard Management Plan (LMP) (Blueprint Ecology Ltd 2025) includes detailed descriptions of lizard values and habitat types present within the site. That report should be read in conjunction with this Wildlife Approval Assessment.

A survey of the development site was undertaken by Blueprint Ecology Ltd on 24 September 2025 to determine habitat quality and determine the likelihood of the presence or absence of all potential lizard species. The survey confirmed 20 areas of habitat over 0.83 ha (**Figure 2**). 19 areas total 0.65 ha consisting of small, fragmented, low value habitat predominantly for Not threatened northern grass skink (*Oligosoma polychroma*) and to a lesser extent At Risk copper skink (*Oligosoma aeneum*). Habitats include rough pasture, weedland, ornamental garden, scrub margins, and farm debris. There is one area of seral (young) native broadleaved forest totalling 0.18 ha adjacent to SH59. Given the small size and disturbance from the road, it is unlikely that any lizards are actually present in this area. However, a precautionary approach is adopted and management for arboreal geckos (tree-dwelling) is provided for in the LMP.

All native lizards are protected under the Wildlife Act 1953. The Fast-track Approvals Act 2024 (FTAA) provides for Wildlife Approvals which are an authority for an act or omission that would otherwise be an offence against specified provisions of the Wildlife Act 1953 including where native lizards may be harmed or killed during the course of a site's development.

A Wildlife Approval may grant permission to relocate native lizards, and the killing or injury of lizards not caught or relocated from a site.

The purpose of this assessment is to address each Wildlife Approval matter contained in clauses 2 and 5 of Schedule 7 of the FTAA. The Wildlife Approval matters clause 2(1)(a) – (o) are presented in italics in the following sections, followed by our assessment.

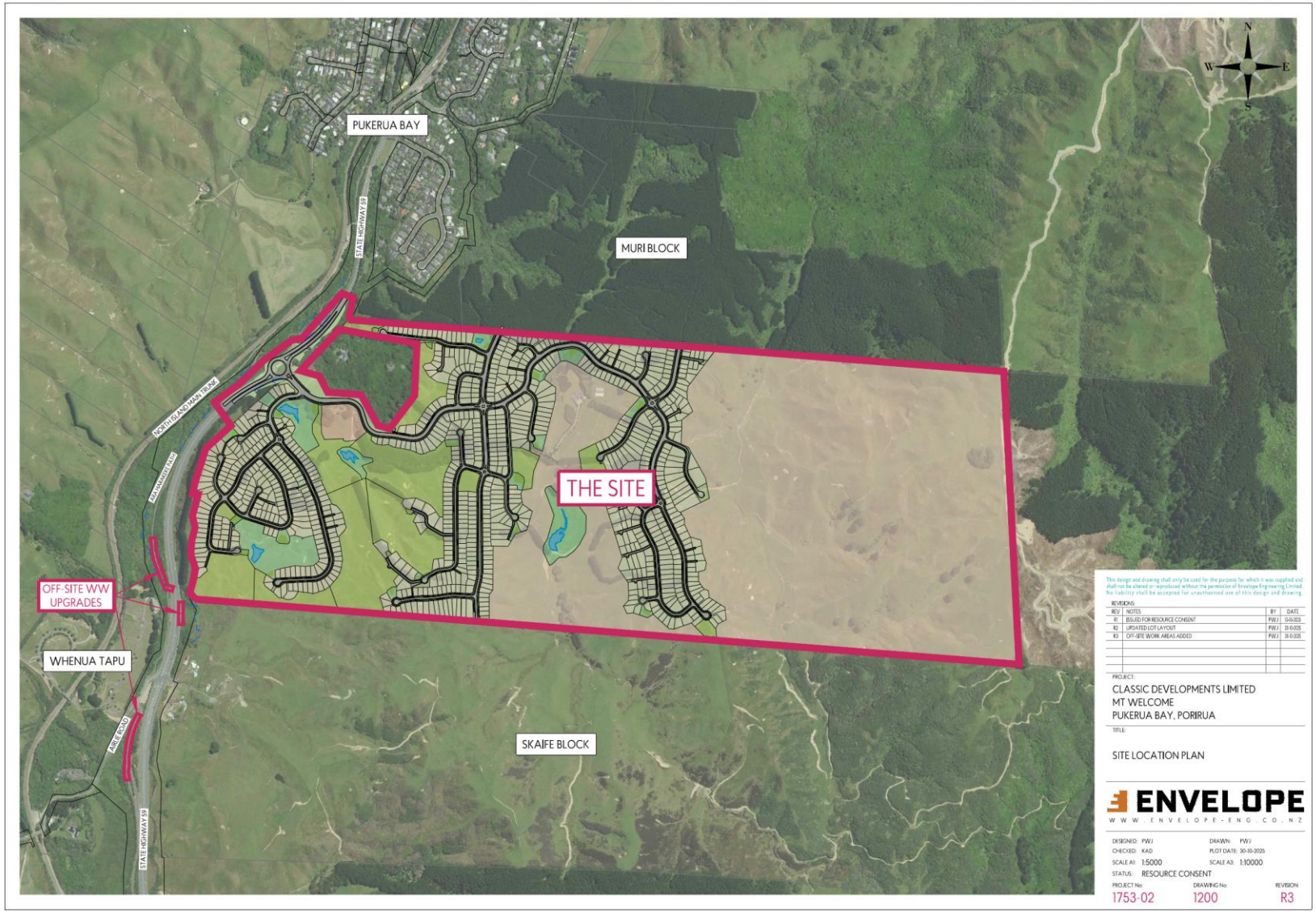

Figure 1. The Mt Welcome Project site.

Figure 2. Potential lizard habitat (red), northern grass skink release sites (yellow), native forest planting (green), earthworks footprint (white).

Matter 1 – clause 2(1)(a)

a) specify the purpose of the proposed activity.

The purpose of the proposed activity is to protect native lizard species by avoiding and minimising the injury or death to native lizards associated with vegetation clearance and earthworks undertaken for the development of the Mt Welcome Project.

Matter 2 – clause 2(1)(b)

(b) identify the actions the applicant wishes to carry out involving protected wildlife and where they will be carried out (whether on or off public conservation land).

PPG will undertake activities off public conservation land.

PPG seeks to capture, handle and relocate native lizard species from areas of all potential habitat within the site (red area **Figure 2**). Northern grass skink (*Oligosoma polychroma*) will be released on site (yellow area **Figure 2**) and arboreal lizards will be released to Karehana Scenic Bay Reserve (**Figure 3**).

PPG also seeks to kill wildlife incidentally during construction activities after all reasonable steps to avoid, minimise, and compensate adverse effects to native lizards.

Figure 3. Forest lizard release site (red line).

Matter 3 – clause 2(1)(c)

(c) include an assessment of the activity and its impacts against the purpose of the Wildlife Act 1953.

The principal purpose of the Wildlife Act 1953 ("Wildlife Act") has been described by the Supreme Court as the protection of wild animals. Recent amendments to the Wildlife Act provide that a section 53 Wildlife Act authority that authorises the killing of wildlife that is incidental to carrying out an otherwise lawful activity may be granted. The authority is to be treated as consistent with the protection of wildlife if, in granting it, the Director-General is satisfied that its overall effect would be consistent with the protection of—

a) populations of wildlife; and
b) individual wildlife.

The activities subject to the wildlife approval are consistent with the protective purpose of the Wildlife Act, as protection of lizards is achieved through:

- capturing and relocating lizards prior to bulk earth working and vegetation removal activities;
- habitat creation and pest control at a selected release site within the Mt Welcome Project site and at Karehana Scenic Bay Reserve.

Impacts include the clearance of vegetation on site which has the potential to disturb, injure and/ or kill native lizards. Native lizards have not been confirmed within the site. A precautionary approach has been adopted to capture lizards within all areas of potential habitat totally 0.83 ha.

Approximately 98.75% of the Mt Welcome Project includes exotic pasture, wetlands and/ or cropping areas which provide no habitat for lizards. PPG has advised that the current development layout encompass all areas and values for lizards that can be avoided to the extent feasible.

After all avoidance measures have been applied, to minimise potential adverse effects to lizards during construction, a Lizard Management Plan (LMP) has been prepared following good practice guidance (DOC 2019)[1]. This LMP seeks to result in an improvement in lizard values by protecting and enhancing a 0.67 ha area for northern grass skink and 0.18 ha of native forest planting (**Figure 2**). In summary, the LMP includes:

- Deploying artificial cover objects (ACOs) and pitfall traps within the best habitats for terrestrial lizards and checking these a minimum of three times;
- Undertaking spotlight searching and supervised tree felling for arboreal geckos
- Releasing northern grass skink on site within enhanced and protected habitat;
- Releasing forest-dwelling lizards to Karehana Bay Scenic Reserve into suitable habitat and providing funding of $2,000 to Pest Free Plimmerton.
- Enhancing a 0.67 ha of grazed pasture by retiring and protecting the area in perpetuity, creating log stacks and undertaking native planting to provide habitat for terrestrial lizards, and undertaking predator control.

[1] Department of Conservation Lizard Technical Advisory Group. 2019. Key principles for lizard salvage and transfer in New Zealand. Department of Conservation, Wellington. 19 p

- Undertaking 0.18 ha of native planting adjacent to existing forest, which will provide habitat for arboreal lizards in the long term.

This management approach will ensure that the vast majority of lizards are relocated and the project will have a net-gain in lizard habitat quality. Any residual effects associated with habitat loss or lizard injury/ death during construction of the development will be negligible.

Following the implementation of the Lizard Management Plan, the actual and potential adverse effects of the activity on native lizards will be positive through an increase in quality of lizard habitats that will be protected in perpetuity which is consistent with the purpose of the Wildlife Act 1953.

Matter 4 – clause 2(1)(d)

(d) list protected wildlife species known or predicted to be in the area and, where possible, the numbers of wildlife present and numbers likely to be impacted.

Based on our pre-development survey, it is estimated that 20-30 lizards are present within the site.

The proposed lizard salvage method includes a thorough network of salvage devices and checking these 3 times. It is estimated that >75% of lizards will be salvaged.

Given the activity seeks to protect and enhance 0.87 ha of lizard habitat in perpetuity, we estimate that the local populations of all relevant lizard species will increase such that it would greatly exceed the number of native lizards potentially killed as part of the activity.

The species predicted to be in the potential lizard habitat on site are summarised in **Table 1**.

Table 1. Lizard species of the Wellington region and likelihood of occupying the applicable habitat on site.

Scientific name	Common name	Threat Status (Hitchmough et al., 2021)	Likelihood of occupying the site	Applicable habitat (van Winkel et al., 2018)	Numbers Likely Present	Numbers likely to be impacted
Naultinus punctatus	Barking gecko	At Risk-Declining	Very low	Seral broadleaved forest	0-1	0
Mokopirirakau "southern North Island"	Ngahere gecko	At Risk-Declining	Very low	Seral broadleaved forest	0-1	0
Oligosoma ornatum	Ornate skink	At Risk-Declining	Very low	Seral broadleaved forest. Edges of scrub and rank grassland/ weedland.	0-1	0
Oligosoma zelandicum	Glossy brown skink	At Risk-Declining	Very low	Edges of scrub and rank grassland/ weedland.	0-1	0

Scientific name	Common name	Threat Status (Hitchmough et al., 2021)	Likelihood of occupying the site	Applicable habitat (van Winkel et al., 2018)	Numbers Likely Present	Numbers likely to be impacted
Oligosoma aeneum	Copper skink	At Risk-Declining	Low	Seral broadleaved forest. Edges of scrub and rank grassland/ weedland.	5	1
Oligosoma polychroma	Northern grass skink	Not threatened	High	Edges of scrub and rank grassland/ weedland.	20-30	5
Woodworthia maculata	Raukawa gecko	Not threatened	Very low	Seral broadleaved forest. Edges of scrub and rank grassland/ weedland.	0-1	0

Matter 5 – clause 2(1)(e)

(e) outline impacts on threatened, data deficient, and at-risk wildlife species (as defined in the New Zealand Threat Classification System).

There are no threatened or data deficient species occurring within the site.

The likelihood of the presence of any native lizard species classified as At Risk is low, but not entirely implausible. There are potential direct impacts to At Risk barking gecko, ngahere gecko, ornate skink, glossy brown skink, and copper kink associated with the construction activities. These impacts will be minimised and compensated as per the above sections such that there are positive effects to these species.

Matter 6 – clause 2(1)(f)

(f) state how the methods proposed to be used to conduct the actions specified under clause 2(1)(b) will ensure that best practice standards are met

The Department of Conservation has prepared a "best practice" guidance document (DOC 2019) which describes nine principles that should be adhered to when applying for a Wildlife Act Authority for a lizard salvage and transfer resulting from a proposed development project (DOC's principles). It covers the practice of lizard salvage and transfer and addresses the entire process including:

1. Assessments of the impacts of proposed developments on lizards and exploration of alternatives (e.g. avoidance of lizard habitat).

2. Planning of salvage operations and assessment and approval of these proposals from the appropriate authorities.

3. Preparing habitat at release sites, capturing lizards at impact sites, temporary captivity (if required), data collection, transport to and release at receiving sites.

4. Post-release monitoring, contingency implementation as appropriate, and reporting to DOC (and/or other consent authorities).

A summary of the nine principles and how these matters have been addressed is provided in **Table 2**.

Table 2. Assessment of DOC's Nine Principles for Lizard Salvage.

Principle for Lizard Salvage	Summary of Assessment of Principle
1. Lizard species' values and site significance must be assessed at both the impact (development) and receiving sites.	Lizard species' values, and site significance has been assessed at the development site based a pre-clearance survey of available habitats via Artificial Cover Objects. The significance of the habitat at the impact site for lizards has been assessed based on the size, quality and species values. Lizard values at the receiving site have been assessed by an experienced herpetologist using expert judgement.
2. Actual and potential development-related effects and their significance must be assessed.	The actual and potential development related effects and their significance have been assessed based on the Environment Institute of Australia and New Zealand (EIANZ) Ecological Impact Assessment guidelines (Roper-Lindsay, et al. 2018) (hereinafter referred to as the EIANZ Guidelines). Only a small number of northern grass skink or copper skink are expected on site, and the overall ecological effect after compensation has been applied is Negligible.
3. Alternatives to moving lizards must be considered.	We have been advised by the Applicant that the current layout encompasses all areas and values for lizards that can be avoided to the extent feasible. There are no alternatives to moving lizards.
4. Threatened lizard species require more careful consideration than less-threatened species.	No lizard species listed as Threatened (Hitchmough et al. 2021) are known on the mainland within the Wellington Ecological District. No Threatened lizard species are applicable to this LMP.
5. Lizard salvage, transfer and release must use the best available methodology.	Lizard salvage methodology includes the best available approach for lizard salvage. For terrestrial lizards, this includes an extensive grid of ACO's and pitfall traps at c. 5 m spacings within habitat shown in **Figure 2**. The effort allocated to lizard salvage will include a minimum of three checks and then continue to occur until 90% of the lizards present have been captured, or at least two consecutive days of no lizards being detected. For arboreal lizards, this includes two nights of spotlight search and one day of supervised tree felling. The transfer of lizards will be undertaken in the most appropriate way to minimise stress on lizards (cloth bags, terrarium) and lizards will be relocated the same day. The release site will be enhanced with log stacks and predator control to provide immediate protection.

Principle for Lizard Salvage	Summary of Assessment of Principle
6. Receiving sites and their carrying capacities must be suitable in the long term.	The forest lizard receiving site is Karehana Bay Scenic Reserve which is a large area of mature native forest with suitable habitat for the relevant species. This release site will allow for population growth and secondary spread and provide suitable habitat resources to cater for the carrying capacity in the long-term for all forest-dwelling species of lizard potentially at Mt Welcome. The northern grass skink release sites are within the Mt Welcome site and include five areas of retired farmland. The lizard release sites will have better-quality habitat in relation to the development site. The lack of existing habitat in these locations means that the long-term carrying capacity is suitable.
7. Monitoring is required to evaluate the salvage operation.	If >20 lizards of any species are salvaged post-release monitoring will be undertaken for three years.
8. Reporting is required to communicate outcomes of salvage operations and facilitate process improvements.	Reporting of the outcomes of the lizard salvage will be provided to DOC. In addition, reporting of post-release monitoring will be provided annually for three years, if required.
9. Contingency actions are required when lizard salvage and transfer activities fail.	For species unlikely to occur on site (forest-dwelling species), we have taken a precautionary approach and included a pre-determined release site that caters to all possible species that could be encountered. We have provided a sliding scale of habitat enhancement and predator control relative to the number of northern grass skink recorded.

Matter 7 – clause 2(1)(g)

(g) describe the methods to be used to safely, efficiently, and humanely catch, hold, or kill the animals and identify relevant animal ethics processes.

The relocation will be undertaken in the most appropriate way to minimise stress on lizards. In order to ensure the welfare of animals during relocation and to maximise the chance of a successful relocation outcome; all staff will be suitably trained and experienced in the capture, handling, holding and release techniques that will be used. Lizard handling will be kept to a minimum and will only be carried out by trained and experienced staff. Handling will be limited to capture, morphometric measurement, and photography.

Captured lizards will be relocated to the identified release sites and will be released as soon as practicable into the release site (within 1-2 hours). Lizards will be released directly into enhanced habitats (e.g. log piles).

Lizards will be held in individual breathable cloth bags. Each cloth bay with have a small amount of damp grass from the capture site and a wetted sponge will be placed inside with the lizards to prevent dehydration. All lizards within cloth bags will be temporarily stored in ventilated, hard-sided terrariums (to prevent accidental crushing). Terrariums will be placed in secure, shaded locations (ideally where the internal temperature is kept below 10°C) until they can be transported to the release site.

Matter 8 – clause 2(1)(h)

(h) state the location or locations in which the activity will be carried out, including a map (and GPS co-ordinates if available).

PPG seeks to capture and handle all native lizard species from areas of potential lizard habitat (red area **Figure 2**) and relocate them to the release site on (yellow area **Figure 2** and **Figure 3**). The full development area is shown on **Figure 1**.

Matter 9 – clause 2(1)(i)

(i) state whether authorisation is sought to temporarily hold or relocate wildlife.

An authorisation is sought to only relocate wildlife.

Matter 10 – clause 2(1)(j)

(j) list all actual and potential wildlife effects (adverse or positive) of the proposed activity, including effects on the target species, other indigenous species, and the ecosystems at the site

Actual and potential adverse effects to lizards after all avoidance measures have been considered include the injury/ death of animals during the construction of the wind farm.

Positive effects include an increase in protected lizard habitat that is of higher quality.

Effects on other indigenous species and ecosystems at the site are outlined in the Ecological Assessment prepared by BlueGreen Ecology attached to the Substantive Application.

Matter 11 – clause 2(1)(k)

(k) where adverse effects are identified, state what methods will be used to avoid and minimise those effects, and any offsetting or compensation proposed to address unmitigated adverse effects (including steps taken before the project begins, such as surveying, salvaging, and relocating protected wildlife).

Actual and potential adverse effects to lizards after all avoidance measures have been considered include the injury/ death of animals during the construction of the site which will be minimised by relocating lizards prior to clearance works commencing. Compensation for the loss of habitat includes protecting and enhancing 0.67 ha of lizard habitat and 0.18 ha of native forest planting.

Matter 12 – clause 2(1)(l)

(l) state whether the applicant or any company director, trustee, partner, or anyone else involved with the application has been convicted of any offence under the Wildlife Act 1953.

It is understood that neither PPG, nor director, trustee, partner, or anyone else involved with the application has been convicted of any offence under the Wildlife Act 1953.

Matter 13 – clause 2(1)(m)

(m) state whether the applicant or any company director, trustee, partner, or anyone else involved with the application has any current criminal charges under the Wildlife Act 1953 pending before a court.

No.

Matter 14 – clause 2(1)(n)

(n) provide proof and details of all consultation, including with hapū or iwi, on the application specific to wildlife impacts.

The Applicant consulted widely on the project, including seeking the views of and procuring cultural values assessments from mana whenua groups, in the manner detailed in Section 3 and Appendix 2 of the Substantive Application.

Matter 15 – clause 2(1)(o)

(o) provide any additional written expert views, advice, or opinions the applicant has obtained concerning their proposal.

The Applicant procured an Ecological Assessment which was prepared by the BlueGreen Ecology which is attached to the Substantive Application. The Applicant consulted widely on the project, including with mana whenua, local authorities and relevant administering authorities (including DOC).

References

Department of Conservation Lizard Technical Advisory Group. 2019. Key principles for lizard salvage and transfer in New Zealand. Department of Conservation, Wellington. 19 p

Hitchmough, R.A.; Barr, B.; Knox, C.; Lettink, M.; Monks, J.M.; Patterson, G.B.; Reardon, J.T.; van Winkel, D.; Rolfe, J.; Michel, P. 2021: Conservation status of New Zealand reptiles, 2021. New Zealand Threat Classification Series 35. Department of Conservation, Wellington. 15 p

van Winkel, D, Baling, M & Hitchmough, R. 2018. Reptiles and Amphibians of New Zealand. A Field Guide. 366 p

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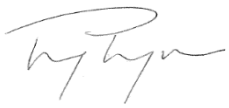

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