

Memo

To:	Dan Smyth; Classic Developments Limited	Project:	2535
From:	Tony Payne; Blueprint Ecology Limited	Date:	8 July 2026
Subject:	Mt Welcome, Pukerua Bay: Assessment of effects on lizards		

Dear Dan,

This memo has been prepared by Blueprint Ecology Limited to assist the Expert Consenting Panel (the Panel) and the Department of Conservation (DOC) in their review of the actual and potential effects on native lizards of the proposed Mt Welcome residential subdivision at 422 State Highway 59, Pukerua Bay, Porirua ("the site").

This assessment follows the EIANZ Ecological Impact Assessment Guidelines (Roper-Lindsay et al. 2018)¹ and should be read alongside the Lizard Management Plan (LMP)² the Wildlife Approval Assessment: Lizards³, and lizard survey memo⁴, which are already before DOC and the Panel and set out the lizard salvage, release site and predator control programme in full. That information is not repeated here except where necessary for this assessment.

1. Background

The Mt Welcome Project is a staged residential subdivision of 950 lots and associated infrastructure at Pukerua Bay, Porirua, for which Pukerua Property Group Limited Partnership is seeking resource consents under the Fast-track Approvals Act 2024 (FTAA). The project requires vegetation clearance and earthworks across the developable area.

Two categories of effect on lizards arise from the project:

- Construction effects. The disturbance, injury or death of resident lizards, and the loss of occupied habitat, during vegetation clearance and earthworks; and
- Operational effects. A chronic increase in predation pressure on forest-dwelling lizards from the increase in domestic cats associated with c. 950 new dwellings.

Both are addressed below.

¹ Roper-Lindsay, J., Fuller S.A., Hooson, S., Sanders, M.D., & Ussher, G.T. (2018). Ecological impact assessment. EIANZ guidelines for use in New Zealand: terrestrial and freshwater ecosystems. 2nd edition.

² Blueprint Ecology Limited. 18 November 2025. Lizard Management Plan: Mt Welcome, Pukerua Bay. Report prepared for Pukerua Property Group Limited Partnership. 26 pages

³ Blueprint Ecology Limited. 18 November 2025. Wildlife Approval Assessment: Lizards. Mt Welcome, Pukerua Bay. Report prepared Pukerua Property Group Limited Partnership. 16 pages

⁴ 4. Blueprint Ecology Ltd. 5 May 2026. Mt Welcome, Pukerua Bay: Lizard survey results. Memorandum prepared for Classic Developments Limited.

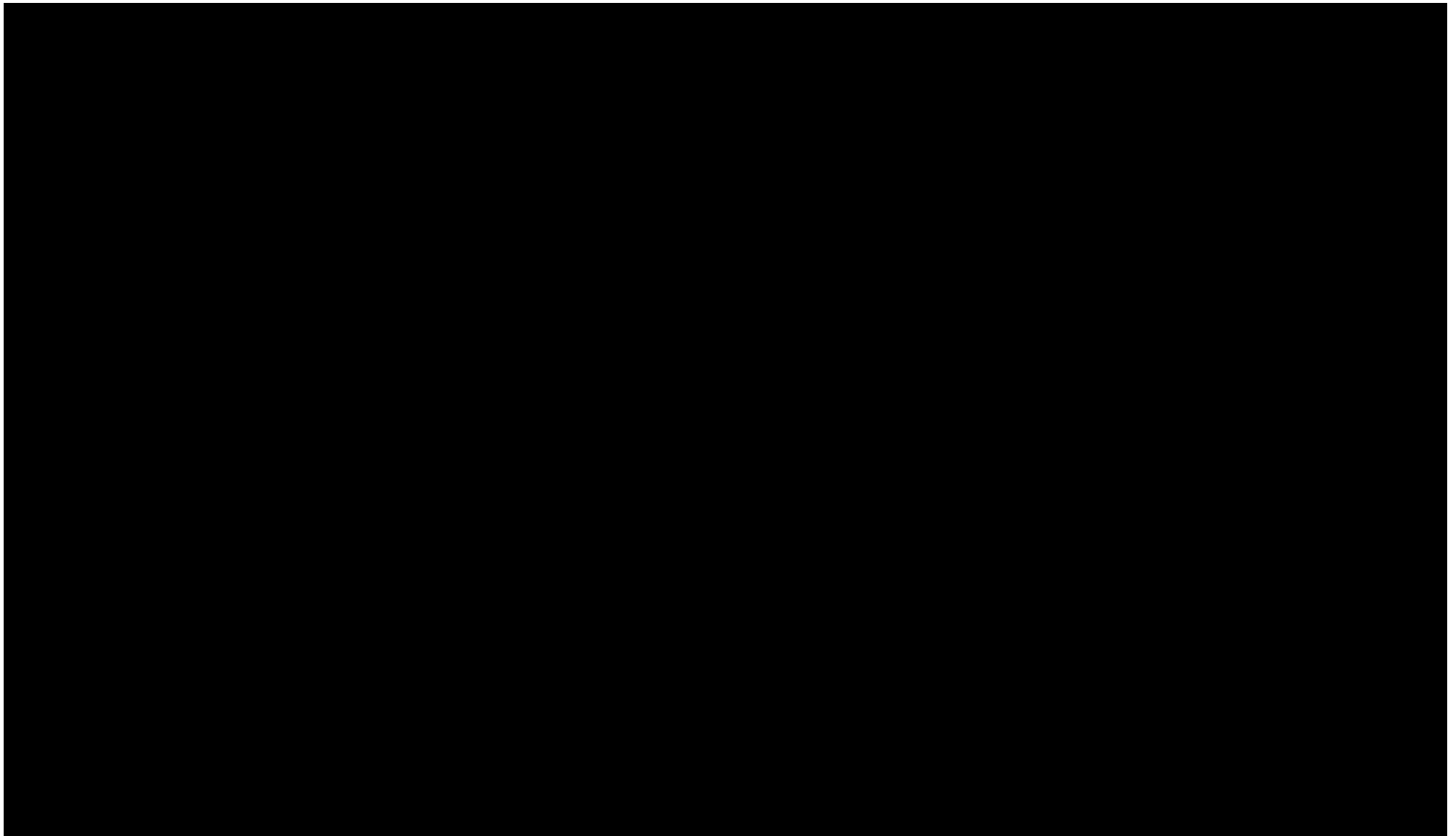


Figure 1. Project footprint (white), lizard habitat (green) "the site".

1. Lizard Survey Results and Site History

The LMP identified 20 areas of potential lizard habitat totalling 0.83 ha (8,332 m²): 19 areas were low-quality, exotic-dominant terrestrial habitat (rough pasture, weedland, scrub margins, ornamental garden and farm debris) totalling 0.65 ha (6,476 m²), and one 0.19 ha (1,858 m²) area of moderate-quality seral broadleaved forest (Area 1) [REDACTED]

The April 2026 lizard survey used 110 Artificial Cover Objects (ACOs) checked three times between 1 and 3 April 2026 across the 19 accessible terrestrial habitat areas (0.65 ha) ($\mu = 330$). Area 1 was not surveyed at this time due to access and safety constraints, with spotlighting planned prior to disturbance in accordance with the LMP.

The April 2026 survey recorded 14 northern grass skink and 4 copper skink captures (3 individual copper skinks, one recaptured), within ornamental garden and rough pasture/weedland margins. No other species or lizard sign were recorded. The LMP took a precautionary approach and identified 10 additional areas of potential lizard that were surveyed out of an abundance of caution with no lizards recorded.

These results are consistent with, and provide direct empirical support for, the LMP's pre-survey estimation of a low number of animals dominated by northern grass skink with copper skink also possible (LMP Section 2.1).

In addition to the LMP habitat survey (24 September 2025) and April 2026 survey, the site has been visited and searched by Mr Payne on three other prior occasions:

- 13 March 2019: a manual search targeting lizard microhabitats on site, particularly shelterbelts, pine forest, buildings, farm debris, logs, rocky outcrops within grazed pasture and garden vegetation margins. No lizards or lizard sign were recorded.
- 11–12 August 2020: continued incidental checking of potential lizard habitat across the site.

Cumulatively, an estimated six hours of manual searching has been undertaken within the site outside of the formal ACO-based survey, with no lizards or lizard sign detected on any occasion.

The absence of detections during the 2019 and 2020 manual searches, followed by confirmed low-density presence via systematic ACO survey, reflects the low density of these populations and does not indicate additional habitat within the site beyond that is already assessed in the LMP.

Separately, a targeted survey is currently underway of a c. 4 ha area of kohekohe-tawa forest on an adjacent property, subject to QEII National Trust (**Figure 2**). This survey comprises 30 Closed Cell Foam Covers (CCFCs) as artificial arboreal refugia, checked three times in spring and three nights of spotlight survey also scheduled for spring 2026 when conditions become suitable for detecting lizards.

Given the large size, height and structural complexity of the QEII forest, it is considered reasonable that cryptic arboreal species, including At Risk ngahere gecko (*Mokopirirakau* "Southern North Island") or barking gecko (*Naultinus punctatus*) could be present in the forest, and the presence of these species cannot be entirely excluded even should the CCFC and spotlighting survey record no arboreal geckos. A precautionary approach to forest-dwelling and arboreal lizards is therefore retained for Area 1 and the nearby QEII forest, consistent with the LMP.

The total area of lizard habitat within the development footprint, confirmed by the April 2026 survey, is 3,484 m² (**Figure 1**). This includes nine small, discrete areas of low-quality, exotic-dominant terrestrial habitat (long grass along vegetation margins, gardens etc.).

Despite there being a reduction of c. 0.5 ha of lizard habitat already accounted for as being affected by the project in the LMP, there has been no change in the extent of lizard habitat protection and enhancement measures across the site. The Mt Welcome project seeks to result in a genuine improvement in lizard values by protecting and enhancing a 6,700 m² of grassland across five areas for northern grass skink and copper skink and undertaking 1,880 m² of native forest planting around the adjacent QEII forest.

The LMP measures will almost double the amount of habitat for skinks on site and protect these areas in perpetuity. Predator control, native planting and the construction of log stacks will enhance habitat such that there is an improvement in both the quality and quantity compared with the current state of the environment. In addition, the application proposes a Pest Animal Control Plan and consent requirements for cat management to minimise potential effects associated with an increase in predation from domestic cats.

Table 1. Lizard habitat within the development footprint.

Label	Type	Quality	Size (m ²)
1	Seral broadleaved forest	Moderate	1,858
2	Agapanthus and long grass	Low	135
3	Agapanthus and long grass	Low	171
4	Planted flax and long grass	Low	504
5	Garden and long grass	Low	103
6	Garden and long grass	Low	123
7	Garden and long grass	Low	251
8	Pine forest edge, mamaku and long grass	Low	104
9	Native planting edge with long grass	Low	127
10	Native planting edge with long grass	Low	108
		Total	3,484
Release site	Grazed pasture, forest margin		8,580

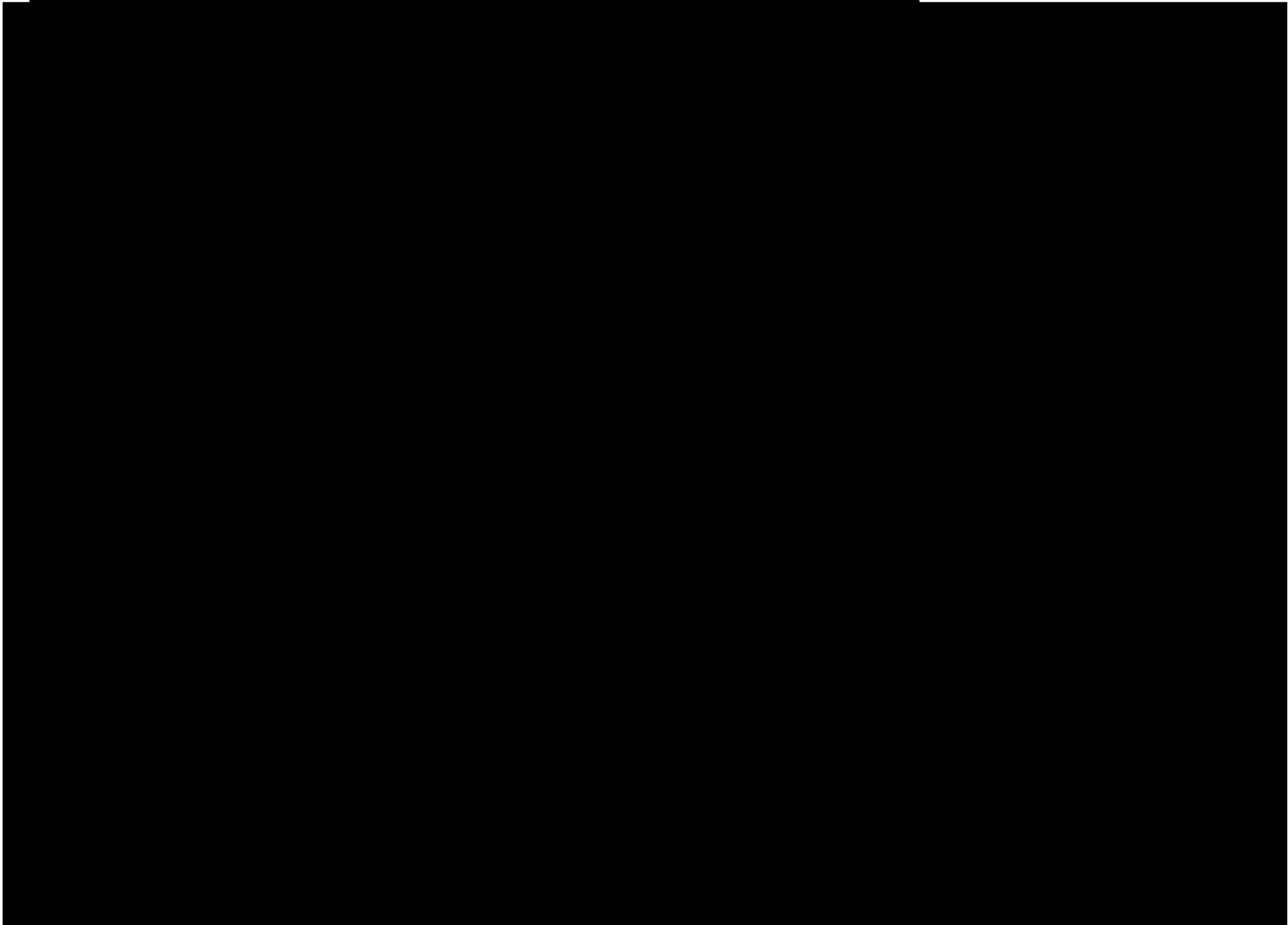


Figure 2. CCFC (pink square), development footprint (white).

2. Operational Effects: Cat Predation on Forest-Dwelling Lizards

The establishment of c. 950 dwellings will increase the resident and roaming domestic cat population within and adjoining the site. Cats are well-documented predators of native lizards and are known to range widely from home, including into adjoining reserves and forest remnants⁵, with home range and movement studies indicating that meaningful exclusion buffers in rural and urban-fringe landscapes need to be substantial⁶. This represents a chronic, ongoing predation pressure on forest-dwelling lizards, including the confirmed copper skink population and any cryptic arboreal geckos within the adjacent QEII kohekohe-tawa forest. This operational effect is distinct from, and is not addressed by, the one-off construction-phase salvage under the LMP.

To manage this operational effect, the application proposes:

- a consent requirement that all domestic cats within the development be desexed and microchipped, reducing the risk of stray or feral population establishment and enabling identification of straying animals; and
- a Pest Animal Control Plan implemented within the QEII-protected land and a surrounding buffer, targeting all feral and domestic animals that stray into the QEII area. Cats (feral and domestic) will be captured using live cage traps: feral cats will be managed as pests, while domestic cats will be released, with owners provided educational material, to encourage them to keep their cats out of the forest. This programme should be implemented for a minimum of 10 years.

These measures directly target the chronic predation pathway that a construction-phase salvage cannot address and are commensurate with the precautionary position adopted for forest-dwelling lizard species in Section 2 above.

These cat management provisions apply only to the QEII-protected kohekohe-tawa forest and its surrounding buffer. They are not proposed to extend to the native forest on the western side of State Highway 59, as the highway acts as a physical barrier and deterrent to cat movement, substantially reducing the likelihood of cats from the development reaching that forest.

No other sensitive receiving environments (e.g. forest, wetland) are considered likely to be affected. To the north, the site adjoins the Muri Road development, which was recently granted resource consents for residential housing⁷ and includes its own requirements to protect and manage adjacent forest and wetland values from an increase in residential housing effects. To the east and south, the site is bounded by grazed pasture extending at least 1 km before reaching seral native forest, providing a substantial buffer that limits the likelihood of cat predation effects extending to that habitat.

3. Assessment of Effects (EIANZ 2018)

The EIANZ Guidelines require ecological effects to be assessed by combining the ecological value of the resource affected, and the magnitude of effect on that resource, to derive an overall level of effect using the EIANZ effects matrix **Table 2**. Ecological effects are summarised in **Table 3**.

Overall, the level of construction and operational effects before mitigation range from Low to High. Following full implementation of the LMP's salvage, habitat creation, planting and predator control programme, the residual effect is assessed as Very low or Low, consistent with the overall effect rating already applied to the site as a whole in the LMP.

⁵ van Heezik, Y., Smyth, A., Adams, A. & Gordon, J. (2010). Do domestic cats impose an unsustainable harvest on urban bird populations? *Biological Conservation*, 143(1), 121–130; Kays, R. et al. (2020). The small home ranges and large local ecological impacts of pet cats. *Animal Conservation*, 23(5), 516–523.

⁶ Metsers, E.M., Seddon, P.J. & van Heezik, Y.M. (2010). Cat-exclusion zones in rural and urban-fringe landscapes: how large would they have to be? *Wildlife Research*, 37(1), 47–56.

⁷ Granted resource consent RC8763 SL0075/22 from Porirua City Council and resource consent WGN230148 from Greater Wellington Regional Council to develop a residential subdivision for Stage 1 of Muri Block, Muri Road, Pukerua Bay

Table 2. Criteria for describing level of effects from the EIANZ guidelines.

Magnitude	Ecological value				
	Very high	High	Moderate	Low	Negligible
Very high	Very high	Very high	High	Moderate	Low
High	Very high	Very high	Moderate	Low	Very low
Moderate	High	High	Moderate	Low	Very low
Low	Moderate	Low	Low	Very low	Very low
Negligible	Low	Very low	Very low	Very low	Very low
Positive	Net gain	Net gain	Net gain	Net gain	Net gain

Table 3. Lizard effects assessment.

Resource	Ecological Value	Magnitude of Effect	Level of Effect	Mitigation	Level of Effect after Mitigation
Northern grass skink and terrestrial habitat (0.35 ha)	Low – Not Threatened, common and widespread; confirmed present at low density (14 individuals recorded)	Low – small, degraded, fragmented habitat well represented in the surrounding landscape; majority of population salvaged under the LMP	Low	Pre-clearance salvage, increase in habitat of 3500 m ² , rodent predator control for three years, log stack creation, long-term control of cats locally.	Very low Positive over long-term.
Copper skink (At Risk – Declining)	High – At Risk, Regionally Vulnerable; confirmed present within terrestrial habitat at low density (3 individuals recorded)	Low – small, discrete population; salvaged and relocated under the LMP to enhanced, predator-controlled habitat	Moderate	Pre-clearance salvage, increase in habitat of 3500 m ² , rodent predator control for three years, log stack creation, long-term control of cats locally.	Low Positive over long-term.
Seral forest (Area 1, 0.19 ha)	Moderate – potential habitat for At Risk species; presence of cryptic arboreal geckos cannot be entirely excluded	Low-Moderate -small, discrete area of clearance relative to local forest.	Low-Moderate	Pre-clearance salvage, sliding scale of compensation, forest buffer planting of 0.19 ha.	Low
QEII kohekohe-tawa forest – forest-dwelling/arboreal lizards (precautionary)	High – potential habitat for At Risk species; presence of cryptic arboreal geckos cannot be entirely excluded	Low- Moderate – result in the loss of some lizards beyond existing mammalian predator pressure.	Moderate-High	Buffer planting. Long-term control of cats on site.	Low

4. Conclusion and Recommendation

The pre-clearance survey confirms northern grass skink and copper skink are present on site at low density, consistent with the LMP's predictions, and provides direct empirical support for the salvage and release programme already established in the LMP.

Applying the EIANZ Guidelines, the level of construction effects after mitigation is Low for all resources.

Given the confirmed presence of copper skink and the precautionary treatment of arboreal geckos in Area 1 and the adjoining QEII-protected forest, we recommend the operational cat management measures (desexing/microchipping consent condition and the Pest Animal Control Plan) be adopted alongside the LMP to address the chronic operational predation effect on forest lizards, which is not otherwise addressed by construction-phase mitigation.

We recommend the results of the ongoing adjacent forest survey (CCFC and spotlighting) be reported to DOC on completion, to confirm or update the precautionary assessment of arboreal gecko presence. We are happy to discuss this assessment with DOC directly if that would assist their review.

Yours sincerely,



Tony Payne

Principal Ecologist⁸

Blueprint Ecology Ltd



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