BEFORE COMMISSIONER MARK ST. CLAIR APPOINTED BY NEW PLYMOUTH DISTRICT COUNCIL

UNDER	the Resource Management Act 1991 ("RMA")
IN THE MATTER	of an application under section 88 of the Act by **ROBE AND ROCHE INVESTMENTS LIMITED** to the **NEW PLYMOUTH DISTRICT COUNCIL** for a subdivision to create 113 residential lots and additional road and recreational reserves at 56 Pohutukawa Place, Bell Block. (SUB21/47803)

STATEMENT OF EVIDENCE OF WILLIAM BRUCE SHAW ON BEHALF OF ROBE AND ROCHE INVESTMENTS LIMITED

1. INTRODUCTION

1.1 My full name is William Bruce Shaw. My experience includes 45 years of relevant work in ecology, with a strong focus on land use effects.

2. QUALIFICATIONS AND EXPERIENCE

2.1 I am Lead Principal Ecologist and a Director of Wildland Consultants Ltd, based in Rotorua. I have a Master of Science degree from the University of Canterbury, 1980, and a Bachelor of Science in Earth Sciences and Biology (double major) from the University of Waikato, 1977.

2.2 My professional memberships include the Royal Society of New Zealand (MRSNZ), the New Zealand Ecological Society, the New Zealand Institute of Forestry (MNZIF), the New Zealand Biosecurity Institute, the Ornithological Society of New Zealand, and the New Zealand Botanical Society.

2.3 I am the author of 24 conference papers, 25 scientific or technical publications, 39 published articles, and more than 1,000 ecological reports, species lists, and general ecological accounts.

2.4 I have been a practising ecologist since 1980, and have lectured in ecology and nature conservation at Lincoln College and the Waiariki Institute of Technology. I previously worked for a consulting firm in Christchurch, and have undertaken ecological survey work and related assessments in urban, rural, and remote back country situations over nearly 40 years. From 1986-

1990 I was employed as a Scientist by the Forest Research Institute, Rotorua, specialising in forest ecology, threatened plants, vegetation mapping, and the ranking and management of natural areas. From 1990 to 1996 I was a Conservancy Advisory Scientist (1990-1994) and then (1994-1996) Protection, Planning and Use Manager for the Department of Conservation.

2.5 Since 1996 I have been Lead Principal Ecologist and a Director of Wildland Consultants Ltd. I have particular expertise in the evaluation of ecological significance, ecological management, especially ecological restoration, and the assessment of ecological effects of actual and proposed land uses.

2.6 Ecological evaluation is a discipline in which I have more than 40 years of experience having, in the 1980s, developed an ecological ranking system that was applied regionally and nationally by the Department of Conservation. I have also developed, for Environment Waikato, a technical guideline for application of natural heritage criteria in their Regional Policy Statement, was an advisor to the Ministry for the Environment on criteria for the evaluation of Section 6(c) of the Resource Management Act 1991, developed ecological evaluation criteria for the previous Bay of Plenty Regional Policy Statement (which became operative in January 2008), and developed (with Dr Kelvin Lloyd) ecological criteria for the Canterbury Regional Policy Statement.

2.7 My work has included presentations of technical evidence before Boards of Inquiry, the Environment Court, the District Court, and the Waitangi Tribunal.

<u>Taranaki</u>

2.8 I have undertaken ecological surveys and assessments in Taranaki since the late 1990s, including botanical surveys, avifauna surveys, evaluation of significant natural areas, preparation of indigenous planting plans, consent audits of major infrastructure projects, an ecological assessment for a major proposed trail, wetland delineation, natural area surveys, and evaluation of ecological effects for a range of proposed land uses and development.

3. CODE OF CONDUCT

3.1 I confirm that I have read the Code of Conduct for expert witnesses contained in the 2023 Environment Court Practice Note and that I agree to comply with it. I confirm I have considered all the material facts that I am aware of that might alter or detract from the opinions I express. In particular,

unless I state otherwise, this evidence is within my sphere of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

4. SCOPE OF EVIDENCE

4.1 This evidence is provided in support of the subdivision and land use consent application ("the application") lodged by Robe and Roche Investments Limited ("the applicant"), to subdivide the land at 56 Pohutukawa Place, Bell Block into 113 residential lots and associated road and recreational reserves.

4.2 I am authorised to give this evidence on behalf of the applicant.

5. INVOLVEMENT IN THE PROJECT

5.1 My involvement in the application has included:

(a) Provision of ecological advice to the applicant, and discussions with other relevant technical specialists on the project team.

(b) Field surveys of the subject site, including collection of water samples from the wetlands for environmental DNA (eDNA) analysis.

(c) Compilation of an ecological assessment that describes the site character, provides an assessment of ecological values and potential effects, and development of measures to protect ecological values.

5.2 I have also reviewed the following documents produced with the application, including:

(a) The original application for consent dated 26 May 2021;

(b) The 'Addendum to Application for Resource Consent 56 Pohutukawa Place' dated 8 July 2021;

(c) The associated scheme plans for the development dated 6 August 2021;

(d) The 'Mounga Ecology Ecological Statement on Road 2 and Water Quality Standards' dated 11 August 2021;

(e) The 'Mounga Ecology Wetland Delineation Map' dated 24 June 2021;

(f) The 'Mounga Ecology Wetland Delineation Results and Assessment Against National Environmental Standards – Freshwater 2020' dated 28 June 2021;

(g) The 'Red Jacket Stormwater Management Report' dated August 2024;

(h) The 'Red Jacket Stormwater Engineering Drawings' dated August 2024;

(i) The 'McKinlay Surveyors Revised Subdivision Scheme Plans' dated January 2025

6. PURPOSE AND SCOPE OF EVIDENCE

6.1 In this matter, I have been asked by the applicant to address the potential ecological effects of the proposed subdivision and land use.

6.2 I confirm that I have read the submissions on the Application, relevant to my expertise, and the Council Officer's Report. The assumptions, assessment and conclusions set out in my ecological assessment[1] remain valid.

6.3 Except where my evidence relates to contentious matters I propose to only summarise the conclusions set out in my expert technical report[1] (the Wildlands ecology report – a copy of which is attached as **Appendix 1**).

6.4 My evidence is structured as follows:

(a) Summary (Section 7);

(b) Application site and receiving environment (Section 8)

(c) Matters raised in submissions relevant to my expertise (Section 9);

(d) Council Officer's Report (Section 10);

(e) Proposed conditions of consent (Section 11); and

(f) Concluding comments (Section 12).

[1] The 'Wildlands Assessment of Potential Ecological Effects' dated October 2024; reviewed and approved for release on 11/10/2024.

7. SUMMARY

7.1 The following potential effects have been considered and evaluated in the Wildlands ecological report and this evidence:

(a) Terrestrial Environments:

- Vegetation clearance;
- Birds that utilise pasture habitats;
- Bat feeding and roosting habitat;
- Lizard habitat; and
- Rubbish dumping into adjacent forest.

(b) Wetland Environments:

- Wetland vegetation;
- Sediment losses into the wetlands;
- Wetland water levels;
- Wetland nutrient levels;
- Setback buffers to protect wetlands; and
- Fish passage.

7.2 By way of a summary, my detailed analyses and assessments enable me to confidently conclude that:

(a) The proposed Parklands subdivision is to be located in an area of grazed pasture and direct adverse ecological effects will be low to negligible; in relation to potential and actual ecological effects on vegetation, habitat loss for terrestrial and wetland bird species, bat feeding and roosting, and lizard habitat loss.[2]

(b) The site is adjacent to the Waipu Lagoons complex – two separate areas at the western and eastern sides of the site – and these have very high ecological values. Detailed analysis of stormwater flows, pre- and post-development, indicate that inflows to the lagoon wetland complexes will remain similar, with the potential for a small increase in water levels in the wetlands. A small increase in water levels in this type of coastal wetland will not result in adverse effects.

(c) Various on-site measures – such as rain gardens and swales - are proposed to ensure that stormwater leaving the site is treated to a high standard.

(d) A 20 metre wide riparian buffer is to be established and maintained, and this will involve additional fencing and indigenous planting to protect wetland margins. This width of riparian buffer is adequate to

[2] See the Wildlands ecology report, Section 13.2, Page 18.

protect wetland margins, and to provide a sustainable strip of terrestrial indigenous vegetation. Indigenous planting should be undertaken using ecologically-appropriate eco-sourced species, matched to the local soil conditions.

(e) There is potential for weeds to spread from residential properties, including from the dumping of garden waste, and various measures are proposed to address this issue.

(f) Overall, subject to the above measures (and as addressed in further detail in the Wildlands ecological report), potential adverse ecological effects on the subject site will be less than minor, and potential adverse effects on the wetland complex are also likely to be less than minor.

(g) There will be some positive ecological effects from the proposal as follows:

- A relatively small area of grazed degraded wetland at the 'head' of the western lagoon complex (where stock currently have access to wetland vegetation and a wet area) – and a small area of the 'head' of the eastern lagoon complex will be retired and planted with eco-sourced ecologically-appropriate indigenous species.[3]

- A 20 metre wide riparian buffer to be established and maintained including additional fencing and indigenous planting, using ecologically-appropriate eco-sourced species, matched to local soil conditions, to protect wetland margins; which will also improve habitat for indigenous plants and fauna. [4]

- Measures to address the potential for weeds to spread and ongoing related monitoring and maintenance. [5]

- Measures to control pest animals that are predators of indigenous birds and game birds.

[3] See the Wildlands ecology report Section 13.3, Pages 19, 21
[4] See the Wildlands ecology report Section 13.3, Pages 21, 22; and, Section 14.0, Pages 22, 23.
[5] See the Wildlands ecology report Section 13.3, Pages 21, 22; and, Section 14.0, Pages 22,23

8. THE APPLICATION SITE AND RECEIVING ENVIRONMENT

8.1 The application site and receiving environment are well described in the Wildlands ecology report and also in the Section 42A report, and I agree with the description in the latter. Detailed descriptions of the site, and its ecological values, are described in more detail in my technical report.

9. SUBMISSIONS

9.1 I have reviewed the submissions which raised particular matters within my field of expertise:

Department of Conservation

9.2 The Department of Conservation has raised the following concerns:

(a) The site of the proposed subdivision and associated works is adjacent to Waipu Lagoon which provides habitat for native fauna including the Threatened-Nationally Critical bird species Australasian Bittern, Mātuku.

(b) The site of the subdivision and associated works do not contain any significant freshwater fish values, but there are wetlands present at the site, and adjacent to the site, that may contain indigenous threatened and non-threatened species.

(c) The subdivision and development of the site has the potential to adversely affect these conservation values through direct disturbance, loss of habitat, sedimentation, and changes to hydrology.

(d) Although the information provided with the application states that adverse effects on these conservation values are likely to be low, there remains some risk and uncertainty.

(e) If consent is granted, appropriate conditions are required to ensure that the activity and effects are as outlined in the application, that management plans are effective, and that there is adequate monitoring to detect and respond to any adverse effects which do arise.

9.3 Decision sought:

If the consent authority is minded to grant the application, that it imposes the following requirements:

Conditions:

- Continuous water level monitoring in the wetlands;
- Bi-annual water quality, fish and invertebrate surveys for the first five years of operation (subject to review after this):
- Annual wetland health monitoring, e.g. wetland extent and vegetation cover;
- Provision of completed ecological management plans, including Vegetation Restoration Management Plan, and Bird Management Plan, to be in accordance with the points below.
- Provision to review the consents if adverse effects are detected by monitoring.

9.4 Response:

The Applicant is proposing to undertake the following:

- Development and implementation of a pre-construction baseline construction, and post-construction Wetland Monitoring Plan for the adjacent lagoons, including measures for fine sediment inputs, hydrocarbons, and heavy metals.
- Post-construction monitoring of wetland sediments is proposed at five-yearly intervals.
- An Ecological Management Plan is to be prepared to oversee the retirement and indigenous planting for three wetland areas, and associated riparian margins and terrestrial areas. These areas are to be protected as Esplanade Reserves. This plan is also to address the control of pest plants and animals.

9.5 A water level staff gauge is already present in the eastern Waipu Lagoon and a similar system could be established in the western lagoon. Daily or weekly monitoring would be adequate, say for five years, and is to be addressed in a Wetland Monitoring Plan.

9.6 In my view, there is no need for a Bird Management Plan. The main threat to indigenous (and exotic) birds in the wetlands and riparian margins, and in the Esplanade Reserves in general, is introduced predators such as mustelids (stoats and weasels, also possibly ferrets), rodents, hedgehogs, and cats (domestic and feral), and the control of pest animals is to be addressed in an Ecological Management Plan, as discussed further below in relation to proposed conditions.

Parininihi ki Waitotara (PKW)

9.7 PKW have raised concerns in relation to the potential effects of stormwater discharges on the Waipu Lagoons.

(a) The site of the proposed subdivision and associated works is adjacent to Waipu Lagoon which provides habitat for native fauna including the Threatened-Nationally Critical bird species Australasian Bittern, Mātuku.

9.8 Response:

This issue has been addressed by the design of the stormwater entrapment and discharge system and pest control to protect indigenous birds is to be addressed in an Ecological Management Plan.

Forest and Bird

9.9 Forest and Bird have raised the following concerns:

- Stormwater.
- Proximity to natural wetland and SNA.
- Insufficient greenspace reserve.
- Impact of residential pets on biodiversity.
- Lack of detailed and thorough environmental impact assessment.

9.10 Response:

- Stormwater: this matter has been addressed with a detailed hydrological assessment and my view is that there will not be adverse effects on the Waipu Lagoons as a result of stormwater discharges from the subdivision site.

- Proximity to natural wetland and SNA: three areas of degraded wetland and associated areas adjacent to the existing Esplanade Reserves are to be retired and restored with indigenous vegetation, along with a reasonably large additional area to be protected as Esplanade Reserve. Control of pest plants and animals is to be addressed in an Ecological Management Plan.

- Insufficient greenspace reserve: this is addressed above in relation to the submission by the Department of Conservation.

- Impact of residential pets on biodiversity: this is addressed above in relation to the submission by the Department of Conservation, and below in relation to proposed conditions.

- Lack of detailed and thorough environmental impact assessment: refer to the Wildlands ecology report (attached as Appendix 1 to my evidence).

Allen Standcliff Taranaki Fish and Game Council

9.11 This submitter has raised concerns about the potential for "increased predation of wildlife, including waterfowl, within the Waipu Lagoons due to the additional domestic cats that will come with the subdivision." Additionally there is a concern that there are likely to be "instances where pūkeko living within the reserve will decimate adjacent residents vegetable gardens and strip fruit trees of their fruit, and Fish and Game will inevitably be called upon to trap and relocate the pūkeko causing damage" and there is also potential for disturbance of residents by pūkeko calling at night.

9.12 The submitter has also provided the proposed solution: "It would be great if there was increased separation between the allotments and the esplanade reserve, perhaps by way of a walkway, although it is acknowledged that this would result in some allotments being smaller than planned. A contribution towards predator control within the Waipu Lagoons reserve would also be appropriate, to try and offset the effects of increased predation by domestic cats."

9.13 Response:

- Three areas adjacent to the existing Esplanade Reserve are to be vested as additional reserve.

- Pest animal (predator) control is already being undertaken in the eastern reserve and an Ecological Management Plan is to be provided to guide the ongoing operation of a pest control network adjacent to the eastern

lagoon and also the establishment of a similar control operation in the vicinity of the western lagoon.

Heather and John Ashton

9.14 This submitter is concerned that "the proposed development is low lying and close to the Waipu Lagoon and a wetland. It is environmentally essential that wetlands are protected."

9.15 Response:

The subdivision layout avoids all wetlands and three areas of wetland that are currently grazed are to be retired and restored. Stormwater design will ensure that wetland hydrology is maintained.

Mary Perrott

9.16 This submitter is concerned about "Waipu Lagoons and wetland boundary intrusion. I oppose in part the Application, specifically the close proximity of proposed residential blocks to the reserve land containing Waipu Lagoons."

9.17 The submitter seeks the following: "Waipu Lagoons and wetlands boundary intrusion. I will be closer to being satisfied with the Application if the offer on Page 24 to develop Residential Guidelines is written into the resource consent. Quoting from Page 24 "The applicant is open to development Residential Guidelines for properties adjoining the reserve. The purpose of this guidance would inform land owners of the importance of the Waipu Lagoons both ecologically and culturally. Furthermore, the side boundary setback distances adjoining the reserve could increased to say 2 metres, with conditions on vegetation and fencing typology and height."

9.18 This 'offer' is repeated 3 times in the Application which indicates sincerity to agree to such a condition. In addition, on Page 27 of the Application, last paragraph (inter alia). Quote "….. It may be appropriate for Council to negotiate with the current lessee and retire the land on the south side of the water course connecting the two waterbodies forming Waipu Lagoon. This would allow for revegetation strengthening the ecological corridor between the two."

9.19 Response:

The Applicant proposes to provide Residential Guidelines for properties adjoining the reserve. These guidelines will address various ecological matters including dumping of garden waste, pest control, and the planting

of pest plant species. These matters are also to be addressed in an Ecological Management Plan.

Graeme Hight

9.20 This submitter is concerned, based on previous flood history, that the current outlet(s) to the Waipu Lagoons is inadequate for storm flows and that "extra stormwater will increase the flooding of surrounding farmland and Waipu Lagoons".

9.21 It is suggested that "before any development work is undertaken, the correct maintenance is completed at the Waipu Lagoons outlet or new culvert pipes installed".

9.22 Response:

Based on the hydrological modelling, the flood regime affecting the lagoons should remain relatively similar to the current situation.

Noeline Hight

9.23 This submitter is concerned for the lagoons, "with all the storm water being adequately planned for the ecology improved".

9.24 Response:

- Stormwater management has been addressed to ensure that there won't be adverse effects on the lagoons.
- Increased riparian buffers are to be provided for wetlands on the margins of the lagoons and these are to be subject to indigenous planting.

Overall Responses to Submissions

9.25 I believe that I have addressed all of the ecological issues raised in those submissions in the Wildlands ecological report, and this evidence.

10. COUNCIL OFFICER REPORTS

10.1 I have reviewed the NPDC Section 42A Report for the Application and the draft Taranaki Regional Council Officer's Report, and various comments are set out below on the NPDC report:

NPDC S42A Report

10.2 The Council's Section 42A report raises the following matters that I wish to address:

(a) In general, most of the ecological matters mentioned in the Section 42A report have been addressed in response to the various matters raised by submitters, as set out in my evidence above. However, the Section 42A report does, at Section 6.4.3, place particular emphasis on the need for further consideration of the potential effects of domestic pets. Concerns about domestic pets were raised by three submitters: Department of Conservation, Forest and Bird, and the Taranaki Fish and Game Council. The effects of additional domestic cats is the main area of concern, and the Officer's report rightly notes that he has "reservations regarding consent conditions that restrict or ban domestic pets from a suburban area given the general nature of pet ownership that pervades a wide cross-section of the community". He then goes on to note that:

- "I have reservations regarding consent conditions that restrict or ban domestic pets from a suburban area given the general nature of pet ownership that pervades a wide cross-section of the community. If conditions are imposed through a consent notice mechanism, then it will be left to NPDC to monitor, manage and enforce compliance with any conditions which, in my opinion, may well result in a logistical and compliance conundrum.

- However, given the sensitivity of the receiving environment in terms of ecological and habitat values, I consider that such a condition should be seriously considered on any consent should the Commissioner be mindful to grant consent. It would be useful for the Applicant to address this in evidence from their ecological expert including whether any such condition on this subdivision will have efficacy if domestic cats may roam from other adjacent residential areas."

<u>Responses</u>

10.3 Dog exclusion is to be addressed with a dog-proof fence to be erected between the Esplanade Reserves and adjacent private lots.

10.4 Feral cats will already be present across the entire farm and coastal landscape in the general vicinity, and also throughout the adjacent existing urban environment at Bell Block.

10.5 The home ranges of cats largely depends on three factors: cat density, prey density, and habitat type (NPCA 2018). Feral cats can have home ranges greater than 200 hectares but domestic cats have smaller home ranges (NPCA 2018). Morgan (2002) studied domestic cats adjacent to the Travis Wetland in Ōtautahi/Christchurch and found that home ranges varies from 0.1-10.1 hectares, and the maximum distance that domestic cats moved from their homes varied from 29 to 276 metres. Cats that lived closer to the Travis Wetland spent more time in the wetland and appeared to be attracted to natural habitat associated with the wetland (Morgan 2002). Another study, by Hansen (2010), found that domestic cats had home ranges of 0.7 to 13.4 hectares and that these extended for 80 to 301 metres from their homes.

10.6 While there would be merit in prohibiting the holding of domestic cats on private properties in the vicinity of the wetland, the reality is that both lagoon areas and associated Esplanade Reserves will already be well-used by domestic (and feral) cats. All of the eastern lagoon, and associated esplanade reserve, is within *c.*200 metres of existing houses. While the western lagoon is further away from existing houses, the eastern margin of this lagoon is nevertheless also within the known home range of domestic cats, that are based in currently-existing houses on the western margins of Bell Block.

10.7 While I agree in principle with the concerns raised in the submissions from the Department of Conservation, Forest and Bird, and Fish and Game, the reality is that both domestic and feral cats will already be utilising the entire area of the existing lagoons and adjacent terrestrial margins, and it will also be very difficult for NPDC to monitor and control cats in the new subdivision.

10.8 Having said that, there are measures that could be applied to address this matter:

- Limit the number of domestic cats that can be held, say to three per property. This would enable the implementation of enforcement action by NPDC if a property owner was to harbour/house a large number of cats (which does happen occasionally in my experience).

- Cat control should be addressed explicitly in the Ecological Management Plan, by the installation of live capture traps and kill traps on the margins of both lagoons.

- Notification of landowners that active cat control is an ongoing activity in the reserves adjacent to the lagoons. Property owners should be informed from the outset that domestic (and feral) cats will be vulnerable to being trapped and/or killed if they wander into the reserves.

TRC Officer's Report

10.9 I agree with the provisions provided in this report.

11. PROPOSED CONDITIONS OF CONSENT

11.1 I have reviewed the proposed conditions of consent relevant to my expertise, and I consider that the conditions are generally appropriate but can provide the following comments:

(a) Proposed Condition 21: this condition is appropriate.

(b) Proposed Conditions 24 and 25: fencing of the reserves is necessary so that owners of properties adjacent to the reserves clearly know where the boundaries are. Dog-proof fences will help to minimise the potential for dogs to stray into the reserve, and to harass indigenous water birds.

(c) Proposed Condition 26: key elements of the Ecological Management Plan will need to be prepared by an appropriately experienced ecologist, and can be addressed by "the consent holder's consultant ecologist and landscape architect". Some of the matters addressed in this condition are largely ecological, rather than landscape, e.g. management of pest plants and animals.

Measures set out in sub-sections (a)-(g) are appropriate, along with the measures suggested in sub-sections (h)-(m) and (o)-(p) in the Advice Note (sub-section (n) of the Advice Note is not an ecological matter).

(d) Proposed Condition 30 – Restriction on Domestic Cats: this matter is addressed above in my evidence. Control of feral and domestic cats in the reserves should be addressed explicitly in the Ecological Management Plan to be prepared under Proposed Condition 26,

specifically the need to control "mammalian vertebrate pests" under Advice Note 26(m). The consent holder is to prepare the Ecological Management Plan and then to implement it for a period of 18 months prior to a handover to NPDC.

11.2 An additional consent condition should be provided, along these lines:

- A consent notice should be issued that prohibits the dumping of garden (or other) waste in the Esplanade Reserves and the planting of pest plant species on private properties. Pest plants are defined as those listed in the National Pest Plant Accord and/or the Taranaki Regional Pest Management Plan (or equivalent).

12. CONCLUSION

12.1 My evidence has assessed all ecological matters and potential effects that I am aware of in relation to the Application and I can safely conclude that:

(a) Potential adverse ecological effects of developing the site will be less than minor due to the highly modified character of the existing farm environment, and the mitigation measures proposed.

(b) There won't be any adverse direct effects on wetlands as an appropriate riparian buffer is to be established.

(c) There won't be adverse effects on wetland hydrology or water quality as an appropriate amount of water will still travel into the wetlands, and surface flows will be treated in swales and rain gardens.

(d) There will be some positive ecological effects from the proposal, as addressed above in my evidence.

William Bruce Shaw
Wildland Consultants Ltd

28 March 2025

REFERENCES

Hansen C.M. 2010: Movements and predation of feral and domestic cats (*Felix catus*) on Banks Peninsula. *MSc Thesis*. Lincoln University. 110 pp.

Morgan S.A. 2002: Movements and hunting activity of house cats (*Felis catus*) living around Travis Wetland, Christchurch, New Zealand. *MSc Thesis*. Lincoln University. 127 pp.

NPCA 2018: Feral and stray cats. Monitoring and Control. A preliminary guideline towards good practice. National Pest Control Agencies, NZ. 46 pp.

APPENDIX 1 – THE WILDLANDS ECOLOGY REPORT 11/10/2024