Before Kaipara District Council

IN THE MATTER the Resource Management Act 1991 ("**RMA**")

And

IN THE MATTER of an application for Private Plan Change 83 ("**PPC83**") by THE RISE LIMITED to rezone 56.9 ha of land at Cove Road and Mangawhai Heads Road, Mangawhai from Rural Zone to Residential Zone.

STATEMENT OF EVIDENCE OF MADARA VILDE ON BEHALF OF THE RISE LIMITED

[ECOLOGY]

22 February 2024

Michael Savage

Barrister

Park Chambers

1. SUMMARY OF EVIDENCE

- 1.1 My name is Madara Vilde. I am the Director and Principal Ecologist at Wild Ecology Ltd, an ecological consultancy specialising in ecological assessments and sustainable land use management.
- 1.2 The Rise Ltd engaged Wild Ecology Ltd to provide ecological advice in support of Private Plan Change Application 83 ("PPC83") located at Cove Road, Mangawhai ("the Site").
- 1.3 In my evidence, I summarise the relevant ecological values of the Site subject to the Private Plan Change ("PPC") proposal ("the Proposal") and immediate surrounds, address relevant matters outlined within the s42A report and raised by submitters, and provide a summary of my key recommendations and conclusions.
- 1.4 I have reviewed and considered the s42A Report prepared by Jonathan Clease to the extent it relates to matters within my area of expertise. An Ecology Review of the Proposal was carried out by Steven Brown of Wildland Consultants on behalf of Kaipara District Council ("KDC"). Both Mr Clease and Mr Brown recommend that the Application is approved subject to minor amendments.
- 1.5 I agree with Mr Clease's and Mr Brown's conclusion and consider that the Site from an ecological perspective is able to accommodate residential density and any potential adverse ecological effects associated with the Proposal can be avoided, minimised, mitigated or off-set through applying appropriate development controls as described under the Cove Road North Precinct Plan provisions.
- 1.6 The s42A report and Ecology Review also contain discussion regarding increased density of potential domestic pets (dog and cat) on Site and their potential impacts on nearby indigenous biodiversity as this matter was highlighted by a number of submitters. I agree with Mr Brown's view that pets can be sufficiently controlled through responsible pet ownership practices. I do not consider that imposing ban or limits to pet ownership will achieve any quantifiable benefits to the wider ecological setting the site lies in. I believe that in the long-term promoting responsible pet ownership can lead to broader community action and protect local ecosystems.

- 1.7 I consider that the proposed Cove Road North Precinct Plan provisions¹ which include recommendations made within the Ecological Assessment Report prepared for the PPC83 sufficiently address the matters relating to potential adverse effects management, ecological mitigation and enhancement of onsite terrestrial and aquatic habitats. In my opinion, successful application of these provisions will result in improved quality and condition of the on-site habitats and improve connectivity between existing ecological areas, and overall ecological functioning within the Site.
- 1.8 Overall, it is my professional opinion PPC83:
 - (a) Has been shaped by a design-led approach to development which can integrate the necessary infrastructure with the protection of the existing terrestrial and aquatic ecological values.
 - (b) Illustrates how residential development and growth can be balanced with ecological enhancement through appropriate planning provisions encouraging enhancement and protection of indigenous habitats as part of future site development.
 - (c) Adopts the effects management hierarchy in relation to ecological matters to ensure that potential ecological effects can be manged in accordance with the Resource Management Act ("RMA").
 - (d) Will improve the overall ecological health, structure, condition and function of the indigenous habitats where they expand over the Site through:
 - establishing appropriate setbacks between built development and natural features;
 - (ii) encouraging revegetation planting of habitat margins and comprehensive pest weed and pest animal control;
 - (iii) strengthening ecological networks by protecting existing ecological features on site;
 - (iv) creating new habitats and buffer areas;

¹ Refer to Attachment 3 – Recommended Precinct Provisions of Planning Evidence prepared by Ms McGrath and Ms Neal.

(v) improving the services provided by ecosystems and resulting in an overall environmental benefit to the indigenous habitats on site and associated indigenous wildlife.

2. INTRODUCTION

- 2.1 My full name is Madara Vilde. I am the Director and Principal Ecologist at Wild Ecology Ltd, an ecological consultancy specialising in ecological assessments and sustainable land use management, working primarily in ecological consulting and environmental research, with a particular focus on terrestrial and aquatic ecology and application of Geographical Information Systems (GIS).
- 2.2 My professional work covers land and infrastructure development and my involvement in projects ranges from pre-purchase due diligence, preliminary ecological assessments/concept development design, ecological surveys and reporting for resource consent applications, private plan change assessments, and implementation of monitoring and reporting of ecological effects and management.
- 2.3 My project works spans across primarily Northland and Auckland Regions, including Kaipara District, where I conduct ecological surveys and assessments. Examples of my experience relevant to this project are:
 - (a) advising private clients on a wide range of activities, including land development and subdivision proposals of all scales, relating to ecological aspects.
 - (b) conducting ecological surveys (flora and fauna surveys) and preparation of ecological reporting for private clients to form part of land use and resource consent applications, including ecological assessments, wetland and stream assessments, ecological management plans and completion of ecological works reports.
 - (c) carrying out wetland assessments utilising Wetland delineation protocols as per Ministry of Environment (MfE) 2022 for identifying and delineating wetlands based on vegetation, soils and hydrology in respect to meeting obligations of National Policy Statement on Freshwater Management 2020 (NPS-FM) and National Environmental Standards for Freshwater Management 2020 (NES-FW).

- (d) representing private clients at resource consent and environment court hearings in Northland Region.
- (e) providing independent ecological consultancy services for Kaipara and Whangārei District Councils including peer review of ecological reports, ecological management plans, and planting completion reports prepared for land use and resource consent applications.
- (f) preparation of ecological restoration/management plans and project management for private landowners and local restoration groups.
- 2.4 I attach a copy of my CV in **Attachment 1** which provides further detail on my experience and expertise.
- 2.5 I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023. I have complied with the Code of Conduct in preparing this statement of evidence. 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. I have no conflict of interest to declare with respect of PPC83.

3. SCOPE OF EVIDENCE

- 3.1 My evidence will focus on the Site's baseline ecological values, potential ecological effects associated with the Proposal, and proposed provisions detailed within the Cove Road North Precinct Plan² to ensure that ecological features and values are protected and enhanced as part of the Site's future development. My evidence should be read in conjunction with Ecological Assessment Report dated October 2022.
- 3.2 My evidence will address the following topics:
 - (a) my involvement with the Proposal;
 - (b) a summary of Site's values in respect to terrestrial and freshwater ecology;
 - (c) assessment of potential effects of the Proposal on ecological values noted on Site;

 $^{^2}$ Refer to Attachment 3 – Recommended Precinct Provisions of Planning Evidence prepared by Ms McGrath and Ms Neal.

- (d) a summary of ecological matters adapted within the Cove Road North Precinct Plan;
- (e) relevant matters raised by submitters;
- (f) relevant matters raised within the s42A Report;
- (g) a summary of key conclusions and recommendations.

4. INVOLVEMENT WITH THE PROPOSAL

- 4.1 I have been engaged by The Rise Limited to provide ecological advice in support of Private Plan Change Application 83 ("PPC83"). I was engaged by the Applicant in April 2022 to undertake an ecological assessment to identify and assess existing baseline ecological values of the Site and outline opportunities, constraints and potential enhancement and mitigation strategies associated with the Proposal.
- 4.2 Since my engagement, I have visited the Site and surrounding area on several occasions during May 2022 to survey the freshwater and terrestrial habitats on the Site. I have since revisited the site on Monday, 12th February 2024.
- 4.3 In producing this statement of evidence, I have reviewed the following evidence and materials:
 - the original Kaipara District Council ("KDC" or "the Council") application documents, including the Assessment of Environmental Effects ("AEE"), associated technical reports, s92 requests for further information and responses;
 - (b) the s 42A hearing report ("s42A Report") prepared by Jonathan Clease planning consultant on behalf of KDC;
 - (c) the Ecological Review prepared by Steven Brown of Wildland Consultants;
 - (d) the expert evidence provided by the Applicant to support its case.

DESCRIPTION OF PROPOSAL

4.4 The Site is comprised of numerous allotments located on the residential fringes of Mangawhai Heads, approximately 1km north-west of Mangawhai Heads town centre, encapsulated by Mangawhai Heads Road to the south, Cove Road to the west, rural land to the north and residential land to the east. The Site is currently zoned as 'Rural' under the Kaipara District Plan (Operative) ("**ODP**"). The total site area is approximately 56.9 ha and the site is predominantly comprised of exotic pastureland, residential dwellings and associated infrastructure, and scattered indigenous and exotic vegetation.

- 4.5 Originally the vegetation cover of the Site and the surrounding area would have been a continuation of the Brynderwyn Hills Forest Complex located to the north of the Site. At current day the site is best described as exotic pasture extending along the northern aspect of the site, rural lifestyle blocks extending along the central/eastern aspect, and larger lot residential development along the sites southern and western boundaries. The site and surrounds have been largely modified from its original ecosystem type, with large tracts of indigenous vegetation cleared for farming purposes pre-1963 and all of the onsite waterways having been altered through channelisation, straightening and culverting to improve the site for agricultural use and housing development.
- 4.6 The site generally forms an upper catchment area of Tara Creek and Mangawhai Harbour with two main intermittent stream features flowing through the sites central and eastern aspects southwards. The intermittent streams converge at the sites southern boundary and continue their flow in a southerly direction through residential areas. The stream systems discharge into the Tara Creek which eventually flows into Mangawhai Harbour. Some smaller ephemeral and intermittent drainage patterns drain the site along its northern aspect in a northerly direction towards an intermittent stream, which discharges into the Sanctuary Lakes to the west of the site. Artificial drains were noted within the central aspect of the site, likely to channelise and divert overland flows and improve the site for agricultural production.
- 4.7 The Site contains some small areas of scattered indigenous vegetation. The majority of the indigenous vegetation on site is contained within the sites northern and central aspects, with the northern bush area being subject to an existing conservation covenant. What appears to be a degraded wetland seep extends along the site's central aspect and encompassed by a sliver of indigenous vegetation, with the wider wetland area being open to grazing stock and managed for pasture production. Indigenous revegetation plantings (subject to an existing covenant) extend along the site's western aspect, and numerous exotic shelterbelts and amenity plantings extend primarily along the sites more built-up southern aspect.

4.8 No vegetation on site is designated as a Protected Natural Area (PNA) or ONL (Outstanding Natural Landscape) nor has been earmarked as a potential Significant Natural Area (SNA), albeit the site is located on the boundary between Rodney and Waipu Ecological Districts and within proximity to the Brynderwyn Hill Forest Complex.

Ecological values

- 4.9 Terrestrial and aquatic values were surveyed and investigated during multiple site visits in May 2022. Note that physical field surveys were only undertaken on The Rise Ltd owned title No 876914 with the remainder of the properties contained within the proposed PPC83 boundaries were assessed through vantage point surveys, high-level desktop assessments and aerial imagery analysis.
- 4.10 The indigenous vegetation contained within the Site boundaries is generally limited to small isolated areas of indigenous regenerating vegetation including a small bush remnant on the sites northern boundary best described as kauri, podocarp broadleaved forest (WF11), indigenous revegetation plantings extending along the sites north-western aspect, a band of manuka, kanuka scrub (VS3) ecosystem type extending along the sites central aspect, with the sites southern aspect being largely dominated by planted exotic vegetation.
- 4.11 Some habitats meeting the definition of a natural inland wetland (as defined under NPS-FM (2020) were identified within the site boundaries, noting that the potential natural inland wetland areas as identified within the Ecological Report are indicative only and given that the majority of the properties contained within the central and northern aspects of the proposed PPC area are subject to continuous agricultural improvement the 'true' wetland extent may vary over time depending on the ongoing intensity and improvements of land use for farming activity. Any potential site development on each of the titles contained within the PPC83 boundaries will be subject to a site-specific Ecological and Wetland Assessment which will require that these habitats are classified and delineated at the time of a land use or subdivision consent application for each specific site.
- 4.12 A rapid fauna survey was conducted to record the presence of avifauna and assess the potential habitat for ichthyofauna, herpetofauna and Chiroptera. Only common mobile avifauna was recorded during the site surveys in May 2022, and no bat or herpetofauna presence on site was recorded.

- 4.13 In respect to aquatic values, noting that no in-stream surveys were possible to be carried out given that no access to properties which contained intermittent stream environments was possible, it is deemed that the Site likely provides habitat to some indigenous freshwater fauna adapted to the existing urbanised setting encompassing the stream immediately to the south and further downstream, such as banded kokopu (*Galaxias fasciatus*) and eel (*Anguilla* sp.) species.
- 4.14 Based on observations during the site survey visits I am of the opinion the existing baseline ecological setting of the streams contained within the footprint of the PPC boundaries are already compromised by past development and are highly modified from their natural state. The streams, while flowing within the Site's boundaries have been historically degraded through channelisation, straightening, and concreting of streambanks, especially so along the individual titles located along the southern aspect of the site and further downstream.
- 4.15 The overall existing ecological values of the Site are generally low-moderate and are associated with a long history of indigenous vegetation clearance on site along with modification to aquatic habitats. The site's general agricultural use (northern and central aspects) have resulted in adverse effects on natural habitats and species through continuous land management through application of fertiliser, resowing and application of insecticides/pesticides, while the southern aspect of the PPC site is largely of built nature, retaining minimal indigenous vegetation cover, with stream systems having been significantly modified to a level were their management regime is reflective of those of artificial drainage channels (straightened, culverted, diverted and subject to continuous clearance).
- 4.16 As part of any potential future site development works, both the hydrological and ecological function of all existing indigenous habitats on Site needs to be recognised, and these features should be protected and enhanced. It is considered The Cove Road North Precinct provisions recognise the ecological values identified within the ecological report prepared for the proposal and, and that adequate protection of indigenous terrestrial and aquatic habitats can be achieved following the rezoning of the site.

Ecological effects

4.17 As this application is for a plan change, physical site development within PPC83 is unlikely to happen in the immediately foreseeable future. Furthermore, at this stage it is not known exactly how any future subdivision/lot layout, and potential infrastructure provision would occur given that the Site is comprised of various parcels of land and owned by a number of landowners.

- 4.18 I consider that the ecological effects associated with the PPC83 have been identified to the extent necessary at a rezoning/plan change level. The Ecological Assessment Report prepared for PPC83 provides comprehensive ecological baseline context of the site and wider surrounds, which has allowed for appropriate provisions³ for ecological effects management to be incorporated within the Cove Road North Precinct Plan.
- 4.19 Any future subdivision in the PPC83 area will require that site specific ecological assessments are carried out at the time of subdivision or land use consent application, allowing to further assess potential adverse ecological effects and provide appropriate site-specific ecological management measures that are to be implemented to ensure that future development does not result in adverse ecological effects or a net loss of ecological value. Examples of possible avoidance can include comprehensive site design and ecological enhancement of natural features, while mitigation, offset or compensation actions can include indigenous planting, pest plant control, pest animal control, and formal protection of identified indigenous habitats across the site.
- 4.20 From an ecological perspective, comprehensive ecological considerations have been included in the Cove Road North Precinct Plan provisions which will not only ensure that the site development following rezoning adequately address potential adverse ecological effects, but also provides an opportunity to preserve and enhance existing indigenous vegetation and habitats noted within the site boundaries, and expand on these features to provide for amenity, landscape and social benefits.

5. RECOMMENDED ECOLOGICAL PROVISIONS OF COVE ROAD NORTH PRECINCT PLAN

5.1 In my opinion, the Proposal has been designed in a manner that recognises the existing ecological and environmental values and constraints of the Site. To ensure that ecological values and their ongoing protection and enhancement are secured, Wild Ecology Ltd provided recommendations relating to appropriate ecological protection and enhancement, avoidance, mitigation and off-set strategies to be employed to ensure that potential adverse ecological effects are avoided during

³ Refer to Attachment 3 – Recommended Precinct Provisions of Planning Evidence prepared by Ms McGrath and Ms Neal.

potential future development of the site. These provisions have been included under Attachment 3 – Recommended Precinct Provisions of Planning Evidence prepared by Ms McGrath and Ms Neal.

- 5.2 Ecological provisions for the Cove Road North Precinct Plan are recognised under PRECX-P4 which requires the protection and restoration of indigenous terrestrial and aquatic habitats including remnant terressite-specificbitats, wetland areas, intermittent and permanent streams within the Cove Road North Precinct when undertaking land use and subdivision, with particular regard to method of enhancement and permanent protection of natural features, appropriate site specific setbacks for buildings, earthworks access, and infrastructure from natural features, and integration of the development with the natural features.
- 5.3 Sufficient controls for management of potential adverse ecological effects have been outlined under Rule 13.13X of The Cove Road North Precinct Plan provisions⁴, which requires that an Ecological Assessment, Ecological Enhancement and Management Plan and Wetland Assessment are to be submitted as part of any subdivision application within the PPC83 boundaries where the site contains or abounds an ecological feature, and that appropriate setbacks (minimum 10 metres) from intermittent and permanent streams and 'natural inland wetland' areas are established and these areas are protected and enhanced as part of the subdivision proposal.
- 5.4 I consider that the ecological provisions outlined under the proposed the Cove Road North Precinct Plan provisions outline appropriate mechanisms for ensuring that the ecological values on Site are not undermined by potential future site development but are in fact a key consideration to the overall design process. The ecological provisions allow to strike a balance between protecting and enhancing areas of higher existing ecological values, while concentrating the potential future development within areas with minimal existing ecological values or functionality.

6. **RESPONSE TO s42A REPORT**

6.1 s42A report prepared by Jonathan Clease on behalf of KDC summarises the findings of the Ecology Review prepared by Steven Brown of Wildlands Consultants as well as concerns raised by submitters. A common theme that is raised both by Mr Brown and the submitters appears to be relating to potential effects of residential pets which I

⁴ Refer to Attachment 3 – Recommended Precinct Provisions of Planning Evidence prepared by Ms McGrath and Ms Neal.

briefly discuss below with a more in-depth analysis provided under Section 8 of my evidence.

- 6.2 Mr Brown agrees that there is no justification to include a ban on domestic dogs and cats within PPC83. He considers that the ban of pet dogs to be onerous and it would not likely result in any ecological gains. However, his view is that to maintain some control on the number of cats present in the area it is recommended the number of cats per property (title) does not exceed one.
- 6.3 I am in general agreement with both Mr Brown's and Mr Clease's conclusion and recommendations, albeit in my opinion there is a lack of evidence that imposing controls on domestic pets (apart from those that relate to responsible pet ownership practices) in residential areas are of any discernible benefit to the ecological setting the Site sits in. This is further discussed under Section 8 of my evidence.
- 6.4 I have reviewed the recommended text amendments to the PPC83 provisions as attached under Appendix 1 of s42A Report⁵ where they relate to ecological matters. I agree with the minor amendments under Rule 13.13X to include that ecological assessments also need to give consideration to the identification and delineation of natural features that may adjoin a site that is being subdivided. I am not in agreement with the proposed changes to matters for discretion to provide a specific consideration whether there is a need to control the keeping of cats and dogs on site as this may set a complicated and biased precedent that is likely to be based on emotive rather than baseline evidence led approach, which would be difficult to establish given that the site and wider area is already one inhabited by domestic pets.
- 6.5 The s42A report concludes that subject to minor amendments to the proposed subdivision rules, the potential effects of PPC83 on ecological values can be appropriately managed, and indeed the plan change has the potential to result in an overall enhancement and long-term protection of these values in accordance with the directions in both the NPS-FM and NPS-IB. I am in agreement with this, noting some disagreement with the recommended text amendments to the PPC83 provisions where they relate to the keeping of domestic pets.

⁵ s42 Report - Appendix 1 Recommended text amendments to the PPC83 provisions

7. **RESPONSE TO SUBMITTERS**

7.1 I have reviewed the submissions received and I briefly address the key points raised in the submissions, as follows.

Effects of residential pets and domestic pet controls

- 7.2 A number of submitters outlined a concern about the potential increase of domestic pets (i.e. cats and dogs) on Site and within the immediate surrounds. Keeping mustelids in captivity is already controlled via the Northland Regional Pest Management Plan.
- 7.3 Given the Site's locality on residential edge of Mangawhai Heads, the existing baseline setting is one already inhabited by a wide range of domestic pets, including existing pets residing within the Site boundaries. While some nearby subdivisions have conditions relating to secured containment of pet dogs, and some controls for pet cats (i.e. required to wear a bell and have to be kept outside covenanted areas at all times), I am not aware of any nearby residential developments that have been designed to be 'pet free.' Therefore, the area is already one where domestic pets are present.
- 7.4 No ground nesting or susceptible fauna was noted as being present on Site or the immediate surrounds during the site survey visits, with a large majority of the recorded species noted on site being common and mobile fauna, which are likely to move when/if disturbed by pet animals. In addition, the existing covenanted bush area present along the northern aspect of the Site is fenced to a 7-wire post and batten standard which already creates a physical barrier to potential domestic pet movement into the bush area from the Site.
- 7.5 Submitters have highlighted concerns of potential domestic pet impacts on North Island brown kiwi (*Apteryx mantelli*) (National Threat Status Not Threatened) and Australasian bittern (*Botaurus poiciloptilus*) (National Threat Status Nationally Critical)⁶ which have been previously recorded within the Brynderwyn Hills Complex. As noted above, neither species were observed on site or immediate surrounds during the site assessments carried out in May 2022, and it is not deemed that the on-site or directly adjacent habitats at current day provide for optimal habitat to these species.

⁶ Conservation status of birds in Aotearoa New Zealand (Robertson *et al.* 2021)

- 7.6 While NI kiwi presence is not discounted on nearby sites such as Bream Tail Farm (as highlighted by submitters), it is unknown which part of Bream Tail Farm NI kiwi reside in (noting this is a large farm unit, circa 450 ha in size), what is their estimated population size and how they had arrived on site in the first place (i.e. natural spread or assisted translocation). My professional opinion is that the bush habitat to the north of the site is unlikely to facilitate NI kiwi movement given that it's comprised of small, isolated bush remnants which are disconnected by Cove Road and Tangaroa Road, and the wider landscape to the north and east of the site is pastoral in nature. In my opinion there is no evidence that the proposal as it stands will have any discernible impact on NI kiwi.
- 7.7 In respect to Australasian bittern the site contains some suboptimal feeding habitat and no breeding/roosting habitat so the impact on Australasian bittern is negligible.
- 7.8 An existing pest animal control network is operational both with the nearby Sanctuary and Bream Tail Farm subdivisions. Similarly to these neighbouring sites, the Cove Road North Precinct Plan provisions will require that any future subdivision within the Site boundaries containing an ecological feature is made subject to site specific integrated pest plant and pest animal management plan, which will positively benefit indigenous fauna present on site and immediate surrounds. The pest management will provide for ongoing control of species such as rabbits, possums, feral cats, rats and mustelids, with proposed appropriate control mechanisms. This will ensure that the existing pest control operation carried out within the nearby sites is extended throughout the Site boundaries.
- 7.9 I believe pet dogs can be effectively controlled through responsible ownership practices, which involves recognizing the impact pet dogs can have on wildlife and taking proactive steps to mitigate these effects. These include ensuring that dogs are securely contained within their respective lot boundaries, have suitable secured outdoor spaces, are not allowed to roam into the ecological areas and are on leads when in public open spaces. By implementing these strategies, dog owners can significantly reduce the risk of their pets harming bird populations, contributing to the preservation of biodiversity and ecosystem health.
- 7.10 The Site already contains numerous dwellings which likely contain domestic pet cats. Imposing domestic pet cat controls in subdivisions in residential areas can be challenging and may not work effectively due to lack of compliance, enforcement

difficulties, cultural and social factors, varied ownership patterns, lack of awareness or education as well as economic constraints.

- 7.11 There are no long-term studies in NZ that highlight that domestic cat bans from new residential subdivisions provide for any measurable benefit to local wildlife populations. A study analysing impacts of domestic cats in peri-urban reserves in Australia⁷ highlighted that community consultation and education are generally viewed as key components to promoting responsible pet ownership, reducing the numbers of stray cats and preventing supplementation of the feral pool, while night-curfews, use of bells and blanket bans were the least successful at having a meaningful effect on reducing predation by pet cats.
- 7.12 Not all cat owners may be willing or able to comply with imposed cat control measures. This could be due to a variety of reasons, including disagreement with the measures, lack of awareness, or inability to provide the necessary care (such as building cat enclosures). Enforcement of cat control measures can be difficult and is also resource intensive. Local authorities may not have the manpower or funding to effectively enforce regulations, especially in larger subdivisions or areas where there are already free-roaming cats, such as the wider setting the PCC83 Site is located in.
- 7.13 To address these challenges, community engagement, education, and collaboration between cat owners, animal welfare organizations, and local authorities are often better alternatives than imposing cat restrictions or bans. Solutions should be practical, culturally sensitive, and considerate of the welfare of both cats and wildlife. Incentivizing compliance through education about the benefits of cat control for the community and the environment, providing information regarding suitable cat enclosures or neutering programs, and developing community-based approaches can help improve the effectiveness of cat control measures in subdivisions.
- 7.14 While domestic pet cats can be potential predators to wildlife, feral cats pose the highest high risk to our native biodiversity. Feral cats tend to be fitter and faster than domestic pet cats and have a higher incentive to predate on native birdlife. As noted above, the Cove Road North Precinct Plan provisions will require that integrated pest animal management takes place on Site, including ongoing control of feral cats with

⁷ Managing impacts of domestic cats in peri-urban reserves (McCarthy S. 2005)

appropriate humane control mechanisms. This will ensure that feral cats are appropriately controlled within the Site boundaries.

- 7.15 While it is outside my expertise, I am aware that pet owners have responsibilities imposed through other laws and regulations which relate to responsible pet ownership. Regardless, in my opinion the potential increase of domestic pets within the Site will have a minimal impact on ecological values associated with the Site or nearby surrounds.
- 7.16 Overall, I consider that any potential effects associated with increased domestic pet animal presence on site on ecological values can be appropriately managed through responsible pet ownership and other regulations, particularly when considered in light of the proposed ecological enhancement measures.

Predator proof fencing

7.17 Some submitters have included a request for the northern boundary of the site to be fenced with a predator proof fence. My opinion is that this would be of minimal benefit given that the remainder of the adjacent sites are not fenced to a predator-proof standard, nor are unlikely to be fenced to this standard in the future. For a predator-proof fence to be effective, the entire boundary of the desired protection area would need to be fenced to this standard, not just individual sections.

Boundary buffer planting

- 7.18 Submitter 8 seeks that a 2-metre planted buffer within PPC83 land along the common boundary with the submitter's land (Bream Tail) is established. Submitter 63 seeks this same planted buffer to be 6-10m in width.
- 7.19 From an ecological perspective a planted buffer with the common boundary of Bream Tail is unlikely to offer any measurable ecological benefits and would likely be more relevant in terms of landscape/amenity value. This is not deemed necessary for the protection of any ecological features, nor as mitigation or off-set for any potential adverse ecological effect, noting that all natural features within the Site boundaries will require that a 10m buffer is established at the time of each respective site subdivision or development. Therefore, I defer this matter to Mr Simon Cocker to evaluate whether this is a relevant matter from a landscape visual assessment perspective.

Natural inland wetland identification and delineation

- 7.20 Submitters 28 and 33 raised a concern that the natural inland wetland areas as identified within the original Ecological Assessment Report (dated October 2022) have not accounted for their entire extent.
- 7.21 As explained within the Ecological Assessment Report, the proposed PPC83 site boundaries extend over numerous private properties, and only the property (title No 876914) where access was permitted along the northern aspect of the site was surveyed in the field during May 2022. The remainder of the wider PPC83 sites vegetation cover (including wetland extent) has been assessed from a distance and/or via aerial imagery analysis. The potential wetland areas extent as shown within the report was provided as indicative only and as observed during the preparation of the Ecological Assessment Report, albeit I consider that the mapped extent of the wetland features provides an accurate representation of the wetland extent within PPC83 boundaries,
- 7.22 Three wetland habitats (identified as W1-W3) within the Ecological Assessment Report were preliminary identified and described. The three potential wetland areas were assessed as being representative of novel rushland ecosystem types at the time of surveys (May 2022) where exotic rushes such as soft rush (*Juncus effusus*) were dominant. Novel rushland ecosystems are extremely common across agricultural land and are associated with high intensity farming environments. They are highly mobile and responsive to changes in land use, occurring as a response to changes in mowing, ploughing, haymaking, grazing intensity, establishment of new farm tracks, and creation of artificial drains. Is it considered these areas are likely to continue expansion and reduction in response to the wider agricultural land regime.
- 7.23 I consider that the potential wetland extent as identified within the Ecological Assessment Report is conservative and their mapped extent is representative of a combination of site visit observations, analysis of current and historic aerial imagery and generally allows to identify the main features which would have to be considered by any potential future site development, which can be further refined (if required) at the time of future subdivision or development of each respective site containing potential wetland area.
- 7.24 To ensure that all wetland areas on site are appropriately delineated (utilising relevant best practice methodology) and recognised at the time of any future subdivision proposal of any site containing a potential wetland area, Rule13.13X of the Cove Road North Precinct Plan provisions requires that a Wetland Assessment is prepared by a

suitably qualified ecologist identifying any potential effects associated with the development proposal on wetland features and how these will be avoided, remedied or mitigated, where 'natural inland wetland' areas as defined under NPS-FM (2020) are located within a 100m setback from the proposed site development works.

7.25 I consider this provides sufficient controls for sites which may contain or abound natural inland wetland areas to be appropriately recognised and protected at a time when future site development takes place.

National Policy Statement for Indigenous Biodiversity

- 7.26 One submitter raises a concern that appropriate consideration has not been given to National Policy Statement for Indigenous Biodiversity (NPS-IB).
- 7.27 While not in effect at the time of the preparation of the original Ecological Assessment Report (dated October 2022) prepared for the Proposal, I have considered the policies and objectives of the NPS-IB which came into effect August 4th, 2023. This is out of caution, given the Proposal as such is not expected to result in any adverse effect on the existing indigenous flora and fauna present within the Site boundaries. I have considered the NPS-IB in the context of an ecological assessment and do not intend this to be considered a planning evaluation.
- 7.28 The objective of the NPS-IB is to maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss in indigenous biodiversity after the commencement date.
- 7.29 In my opinion, the Proposal gives effect to the objectives and policies of NPS-IB in the following ways:
 - (a) The Proposal has been prepared through a careful design-led approach, with any potential future development of the Site requiring that the necessary infrastructure is integrated with the core existing ecological baseline context.
 - (b) No indigenous vegetation clearance or modification is anticipated to be carried out as part of any future site development. Rule 13.13X of the Cove Road North Precinct Plan provisions requires that any subdivision within the Cove Road North Precinct where the site contains an ecological feature including indigenous terrestrial or aquatic habitats shall legally protect any indigenous habitats on site in perpetuity and manage the ecological feature on an ongoing

basis in accordance with an approved Ecological Enhancement and Management Plan.

- (c) The Proposal illustrates how future residential development and growth can be balanced with ecological restoration and protection of the terrestrial and aquatic features contained on site.
- (d) The Proposal will appropriately balance protecting and enhancing sensitive aquatic environment, with future built development will be focused on areas with low existing ecological values or functionality.
- (e) The Cove Road North Precinct Plan provisions relating to ecological aspects will ensure that potential adverse effects on indigenous biodiversity are avoided in the first instance, or where it is not feasible or practicable, that potential adverse effects are appropriately mitigated or off-set so that no overall loss of indigenous biodiversity occurs. The provisions promote restoration of indigenous biodiversity through appropriate ecological management.
- (f) The overall concept design of the proposal has been designed to integrate with the wider landscape and ecological values and serve multiple purposes, including increasing amenity values, habitat creation and an enjoyable green space for future residents.
- 7.30 Therefore, I conclude that the Proposal gives adequate consideration to NPS-IB and will as a minimum maintain, but more likely enhance indigenous biodiversity across the Site as part of future site development.

Effects on water quality and quantity

- 7.31 Some submissions outline a concern relating to the potential effects on the water quality, quantity and overall habitat of the stream habitats on Site and within the downstream catchment area.
- 7.32 In the context of ecology, there are a range of potential effects on freshwater systems that may be associated with development of previously undeveloped greenfield land. These effects primarily arise from physical habitat changes during the development and water quality and quantity changes related to discharges from impervious surfaces.

- 7.33 However, stormwater infrastructure can also play a significant role in improving stream health when properly designed and managed. By implementing effective stormwater management practices, potential adverse effects of urbanization and runoff on waterways can be avoided.
- 7.34 According to the Land Development Report⁸ prepared by Chester, wastewater servicing for the development can be provided for either as an extension to the existing public reticulation or through utilising a private or communal system. As such, if the wastewater servicing is developed as per the recommendations outlined in the associated Land Development Report prepared for PPC83, and any associated technical guidance notes, no adverse effects on freshwater or terrestrial ecology relating to wastewater management are anticipated.
- 7.35 According to the Land Development Report adequate servicing and management of stormwater generated by the future Site development is possible. These provisions have been addressed in a Stormwater Management Plan (SMP)⁹ for the PPC83 area. I understand that the relevant provisions have been included in the Cove Road North Precinct Plan¹⁰ and Chester consider that the proposed provisions impose what is considered to be best practice stormwater management for all impermeable areas, and the effects of development with respect to stormwater will be appropriately managed.
- 7.36 Additional hydraulic inputs from the PPC83 development are likely to result in a greater volume of water entering the freshwater environment to a minor degree, which will likely positively support the growth of hydrophytic vegetation along the riparian margins and therefore support habitat provision for instream fauna such as fish and invertebrates.
- 7.37 When compared to the baseline environment, where land has been actively managed through ongoing application of fertilizer and pesticides, and stock have actively grazed the Site for a number of decades systematically degrading water quality and habitat availability of the onsite watercourses which eventually discharge into the Mangawhai Harbour, in my opinion the Proposal will improve water quality within the catchment to a minor degree through changes in land use and stock exclusion in perpetuity.

⁸ Refer to application for private plan change document Appendix 3a: Land Development Report

⁹ Refer to application for private plan change document Appendix 3c Stormwater Management Plan

¹⁰ Refer to Attachment 3 – Recommended Precinct Provisions of Planning Evidence prepared by Ms McGrath and Ms Neal

7.38 Therefore, I consider that the Proposal will not adversely affect the freshwater quantity, quality and general habitat values within the watercourses on site if recommendations relating to best practice integrated design, erosion and sediment control guidelines provided in the associated reporting prepared for the Proposal are followed. Revegetation planting of riparian margins on sites which contain stream and wetland features will provide for an additional vegetated buffer for any stormwater run-off from the development to be treated before it enters any of the onsite aquatic habitats.

8. CONCLUSION

- 8.1 In my opinion, the PPC83 and the associated Cove Road North Precinct Plan provisions have been designed in a manner that recognises the existing ecological and environmental values and constraints of the Site.
- 8.2 The Proposal aims to strengthen the ecological values of the identified ecological values on site while providing appropriate guidance for future Site development. The effects management hierarchy can be applied with appropriate avoidance, mitigation and off-set strategies employed to ensure that potential adverse ecological effects can be managed in line with the RMA.
- 8.3 In my opinion, the Proposal presents a balanced outcome in relation to ecological matters, striking a balance between protecting and enhancing areas of higher existing ecological values, while concentrating the potential future development within areas with minimal existing ecological values or functionality.
- 8.4 I consider that appropriate management of potential adverse ecological effects of the Proposal can be secured through the provisions outlined within the Cove Road North Precinct Plan. Provided that they are implemented successfully, adverse effects on the environment would be negligible, and would, in fact, allow for the enhancement of terrestrial and ecological values within the PPC boundaries and a deliver a positive biodiversity gain.
- 8.5 It is my opinion that there are no ecological reasons to decline PPC83.

Madara Vilde

Date: 22 February 2024

Council	Kaipara District Council
NRPS	Northland Regional Policy Statement
RMA	Resource Management Act 1991
s32	Section 32 of the RMA / Council's Section 32 Evaluation Report
s42A	Section 42A of the RMA / Council's Section 42A Report
ODP	Kaipara District Plan
NPSFM	National Policy Statement for Freshwater Management
NESFW	National Environmental Standards for Freshwater Regulations
NPSIB	National Policy Statement for Indigenous Biodiversity

LIST OF ABBREVIATIONS USED IN THIS STATEMENT OF EVIDENCE:

Attachment 1 – Madara Vilde CV

MADARA VILDE

PRINCIPAL ECOLOGIST



I am an experienced ecologist with demonstrated history of working in the environmental services industry for over 6 years. Having graduated from University of Edinburgh with a 1st Class Honours degree in Environmental Science I have since been working in a cross-disciplinary field of ecology on the interface of sustainable land development, conservation, and environmental consultancy setting in Northland and Auckland Regions.

I am the Director of Wild Ecology, an independent Ecological Consultancy based in Northland, and have multiple years of ecological survey design and implementation experience. I am a skilled surveyor of flora, avifauna, herpetofauna, bats and aquatic organisms. I have a strong track record in preparation of Ecological Assessments, Ecological Management Plans and Biosecurity Management Plans. My background in spatial analysis and mapping integrating use of ArcGIS field survey and desktop analysis workflows allows Wild Ecology to deliver high quality spatial analysis and mapping services alongside comprehensive ecological surveys and reporting.

I am an excellent communicator and am experienced in working in a crossdisciplinary environment, creating a seamless process to meet time and budget targets, and make best use of resources for any project. My experience in practical delivery of both small and large-scale ecological restoration projects in combination with strong academic background allows Wild Ecology to deliver thorough and pragmatic ecological outcomes to our Clients.

RELEVANT PROJECT EXPERIENCE

2017–ongoing | Private landowners - Auckland and Northland Regions ECOLOGICAL ASSESSMENTS

- Ecological survey and reporting services provided to accompany resource consent applications formulating mitigation and enhancement proposals
- Assessments of ecological effects based on compreheneisve analysis of the proposal
- Site mapping using ArcGIS allowing for integrated decision making and better outcome planning
- Developing ecological and pest management design protocols to ensure that physical works can occur with minimal impact
- Developing relevant site-specific ecological and biosecurity protocols reflective of the proposed activity
- Liaison with relevant stakeholders to ensure that good practical outcomes can be achieved



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EDUCATION

BSc (1st Class Hons) Environmental Science University of Edinburgh (2017)

SPECIALISATIONS

- Preliminary Opportunities and Constraints Mapping
- Ecological Significance and Condition Assessments
- Ecological Effects Assessments
- Ecological Design, Restoration
 and Management Plans
- Geographical Information Systems (GIS)
- Ecosystem Delineation and Mapping
- Ecological Surveys
- Ecological Assessments and Reporting for Resource Consents
- Wetland and Stream Delineation
 Stream and Water Quality Assessments
- Planting and Pest Management Plans
- Biosecurity Management Planning

2017–ongoing | Private landowners - Auckland and Northland Regions ECOLOGICAL RESTORATION AND MANAGEMENT

- Site visits, Client liaison and preparation of ecological restoration and management plans for rural and urban developments
- Preparation of ecological restoration plans based on comprehensive analysis of site's baseline condition, context and surrounding ecological setting
- Co-ordination of practical delivery of projects including preparation of cost estimates, management of contractors, and overall planning and monitoring of project from the inception to delivery

2022–ongoing | Kaipara District Council, Whangārei District Council CONSULTANT ECOLOGIST

- Critically reviewing and assessing resource consent and land use consent applications relating to ecological matters on behalf of Council
- Liaison with Council regarding any potential changes required to be made to application(s) to ensure that relevant ecological targets are met
- Reviewing Ecological Management Plans and providing input in revegetation planting specifications, fencing, and best practice pest weed and pest animal control mechanisms
- Reviewing Completion of Ecological Works reports
- Carrying out site visits for monitoring and compliance (where required)
- Providing input in other relevant projects e.g. Kauri Dieback Management Plan for Whangārei District Council

May 2022–ongoing| Auckland Council

AOTEA PEST PLANT SURVEYS

- Developing a revised pest plant survey methodology for Aotea Pest Plant Surveillance Programme (2022-2025)
- Preparing relevant Health & Safety documentation and Biosecurity Management Plans for the project
- Overseeing the progress of the project to deliver relevant outcomes within the specified timeframes and within cost estimates
- Ensuring project team understands all aspects of the contract relating to their responsibilities, and demonstrate a thorough understanding of ecological and biosecurity practices
- Carrying out field surveys, analysing data and providing associated reporting