

**BEFORE THE INDEPENDENT HEARING PANEL APPOINTED TO
MAKE RECOMMENDATIONS ON PROPOSED PORIRUA DISTRICT PLAN AT
WELLINGTON**

IN THE MATTER of the Resource Management Act
1991 (the Act)

AND

IN THE MATTER of a hearing by the Porirua City
Council on 29 October to 15
November 2021

**STATEMENT OF EVIDENCE OF NICHOLAS PAUL GOLDWATER FOR THE
PORIRUA CITY COUNCIL**

24 September 2021

Qualifications and Experience

1. My full name is Nicholas Paul Goldwater.
2. I am a Principal Ecologist with Wildland Consultants Ltd based in Auckland. I have been employed as a consultant ecologist with Wildland Consultants since 2008.
3. I have a Master of Science (First Class Honours) in ecology and environmental science from the University of Auckland, and have more than 13 years' experience in ecological consultancy. In my role as Principal Ecologist, I undertake field assessments, provide technical advice and services, and manage projects for a range of clients. I have undertaken numerous terrestrial and aquatic assessments in the Auckland, Northland, Waikato, and Wellington regions.
4. I have considerable experience with consents relating to vegetation removal and ecological restoration, including quarrying activities, subdivisions, and infrastructure projects, all involving the assessment of environmental effects under the Resource Management Act 1991 (**RMA**). I have assisted councils with numerous projects that include baseline biodiversity surveys, consent reviews, preparation of Ecological Management Plans, and field surveys of vegetation and habitats, threatened plants, indigenous fish, birds, and reptiles.
5. I have considerable experience assessing and delineating Significant Natural Areas (**SNAs**), or Significant Ecological Areas (**SEAs**) as they are known in Auckland. I have carried out extensive desktop studies of SNAs in the Otorohanga District, helping to compile a database of over 1,000 sites for Waikato Regional Council. Prior to the Auckland Unitary Plan becoming operative, I was involved in the rapid field survey of potential SEAs for Auckland Council, and subsequently I undertook numerous site assessments in order to ground-truth SEA boundaries disputed by landowners. Recently, I provided technical advice for Wellington City Council in relation to the delineation of several urban Significant Natural Areas disputed by landowners.
6. In August 2020, I provided expert ecological evidence for Porirua City Council in relation to SNAs at Plimmerton Farm (Plan Change 18).
7. I have recently managed a project to map and assess approximately 1,600 SNAs in the Northland Region, divided between the three District Councils: Kaipara, Whangarei, and Far North. This is Wildland Consultants' largest SNA project to date, and has involved

undertaking comprehensive literature reviews for each district, working with Councils to refine the significance criteria used to assess each site, extensive mapping and GIS input, and presentations at Council meetings and stakeholder workshops.

8. Through the work I have undertaken for Plan Change 18 and ground-truthing SNAs in Porirua District, I have gained a good understanding of the key vegetation and ecosystem types present in the District. I would like to clarify, however, that I have had no involvement in the original mapping of the SNA layer for Porirua District.
9. I have read the following information in preparation of my evidence:
 - Ecological provisions in the Proposed Porirua District Plan.
 - Original submissions that required ecologist site visits in 2021.
10. My role in the delineation of SNAs within the Porirua District was to undertake site visits to properties owned by submitters to review and refine the extent of SNA boundaries. These site visits were undertaken in July 2021 and I was accompanied by either of my colleagues Dr. Sarah Herbert (Senior Ecologist, Wildland Consultants) or Ms. Ella Buckley (Ecologist, Wildland Consultants). I note that eight additional site visits were undertaken by my colleague Dr. Sarah Herbert (Senior Ecologist) and July, August and September 2021.
11. I have also been asked to provide policy advice on ecological provisions pertaining to (i) the removal of non-indigenous vegetation within SNAs, (ii) undertaking earthworks within SNAs, and (iii) the potential adverse effects of quarrying activities in the vicinity of SNAs.

Code of Conduct

12. I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and confirm that I have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise, except where I have indicated that I am relying on others' opinions. I have not omitted material facts known to me that might alter or detract from my evidence.

Scope of evidence

13. This evidence relates to the Proposed Porirua District Plan: ECO – Ecosystems and Indigenous Biodiversity.
14. This evidence addresses the following matters/topics:
 - a) A summary of Wildlands' involvement in mapping and assessing SNAs in the Porirua District and Wellington region.
 - b) Responses to submissions, including decisions on whether to retain, exclude, or adjust SNA boundaries where they fall within the boundaries of the 40 properties visited by Wildlands in July, August, and September 2021 (summarised in Appendix 1).
 - c) Specific policy issues pertaining to four topics: (i) construction and maintenance of paths and cycleways in public areas within SNAs; (ii) potential adverse effects of quarrying activities on biodiversity values in adjacent SNAs; (iii) rules applied for the removal of indigenous and non-indigenous vegetation; and (iv) earthworks within significant habitats of indigenous fauna.
15. This evidence does not address comments on the following:
 - a) Submissions that query the rules pertaining to areas delineated as SNAs.
 - b) The underlying rationale and formulation of the assessment process for ecological significance within the Porirua District.

Involvement of Wildland Consultants in SNAs in the Wellington Region

16. Wildland Consultants has been involved in the identification and assessment of sites against Policy 23 of the Greater Wellington Regional Policy Statement (RPS) for five councils in the Wellington Region. This includes the delineation of Ecological Sites or 'ecosites' for Kāpiti Coast District Council (2015-2019), and Significant Natural Areas (SNAs) for Porirua City Council (2016-2020), Wellington City Council (2016, 2019-2020), Hutt City Council (2016-2018), and Upper Hutt City Council (2016-2018). Whilst the ecosites in Kāpiti Coast District are currently included in the Proposed Kāpiti Coast District Plan, none of the other identified SNAs have been included in proposed plans to date.

17. Prior to Wildland Consultants' involvement, PCC had undertaken several projects to identify ecologically significant sites and determine their relative significance against Policy 23 of the RPS (Boffa Miskell 2001, Blaschke *et al.* 2011a, Blaschke *et al.* 2011b, Blaschke 2015). Wildland Consultants was contracted in February 2017 to review the methodology previously used to identify SNAs, and to assess whether the methodology used would meet the requirements of Policy 23 of the RPS.
18. As a result of this review, modifications to the assessment and delineation methodology were suggested in 2017. These suggestions included the inclusion of regionally scarce species and nationally threatened fauna species in assessments against the Rarity criterion, and the use of pragmatic guidelines when delineating sites (e.g., when appropriate, following property boundaries and/or fence lines). Additional recommendations were made regarding the information provided for each site and the way that this is presented (Wildland Consultants 2017)¹. Following this review, Wildland Consultants was contracted to reconfigure and update the information provided for each SNA, update the delineation of SNAs, and assess the ecological significance of each site as per RPS Policy 23 (Wildland Consultants 2018)².
19. Further work undertaken by Wildland Consultants in relation to SNAs in Porirua District prior to notification included:
- a) Assistance at landowner drop-in meetings;
 - b) Review of proposed SNA edits following field investigations provided by an external party;
 - c) Assistance with some site visits requested by landowners following a mail out to all affected landowners in July 2018;
 - d) Updates to the SNA database and maps, as required following site visits;
 - e) Identification of indigenous and non-local indigenous trees on urban allotments affected by an SNA, to meet the requirements under Section 76(4A)(a) of the RMA; and

¹ Wildland Consultants 2017: Review of Methodology Used to Determine and Assess Ecological Sites Within Porirua City. *Wildland Consultants Contract Report No. 4198*. Prepared for Porirua City Council. 63 pp.

² Wildland Consultants 2018: Assessment of Ecological Site Significance in Porirua City – Methodology. *Wildland Consultants Contract Report No. 4391*. Prepared for Porirua City Council. 37 pp.

- f) Provision of policy advice on the Ecosystems and Indigenous Biodiversity chapter of the Draft District Plan relating to ecological management, and advice on regional and national planning requirements.

Landowner site visits and responses to submissions

- 20.** Submitter-requested site visits were undertaken to 19 private properties and one area of publicly-owned land³ to review and refine the extent of SNA boundaries between 12 July and 21 September. Desktop analysis using aerial imagery and roadside vantage point surveys (where possible) were undertaken for 12 additional properties where access was not granted by the landowner or if a site visit was not considered necessary. Between 0.5 hour and five hours were spent on each private property during a site visit, depending on the size and vegetative complexity of the portion(s) of SNA contested. Two visits (c.10 hours in total) were required to survey the SNAs at Whitireia Park and Peninsula (public land).
- 21.** Dr. Herbert and I have prepared the site visit reports and adjusted the SNA site boundaries, including removing vegetation within SNAs from properties where we determined the values present did not meet the significance criteria. I have peer-reviewed all site visit reports prepared by Dr. Herbert to ensure consistency.
- 22.** Information collected during the 2021 site visits was used in combination with desktop information to decide whether the contested areas were ecologically significant against the criteria in Policy 23 of the Wellington Regional Policy Statement. Desktop information consulted in writing the updated site visit reports included:
- Porirua 0.10m Urban Aerial Photographs (taken 2019-2020 summer flying season).
 - Wellington 0.3m Rural Aerial Photographs (taken 2016-2017 summer flying season).
 - Aerial imagery available from 2001 to 2021 in Google Earth Pro. Earlier imagery available in Google Earth Pro was not used due to having very poor resolution.
 - Aerial imagery and maps provided by the landowner(s).
 - Ecological reports provided by the landowner(s).

³ Whitireia Park and Peninsula.

- 23.** The methodology for assessment of the ecological significance of any contested part(s) of each SNA followed the guidance prepared by Wildland Consultants Ltd and Kessels Ecology in 2015⁴, and Wildland Consultants Ltd (2018). If the contested part(s) of SNA on a property met at least one of the criteria in Policy 23 of the RPS, the area was considered to be significant.
- 24.** Areas of vegetation dominated by exotic plant species (i.e., >50% cover by exotic species) were not considered to be significant and were removed from SNAs where they had been included. Similarly, areas of indigenous and mixed indigenous-exotic treeland, and fragmented low-stature indigenous shrubland, with a modified or depleted understorey due to grazing, gardening, or another anthropogenic activity, were not considered to be representative of an original habitat type and were removed from the SNA layer.
- 25.** As a result of the site visits and desktop analysis, 20 private properties had SNA boundaries amended, three private properties had SNAs entirely excluded, and the SNA boundaries remained unchanged on nine private properties. Several amendments were made to the boundaries of six SNAs in Whitireia Park and Peninsula and are summarised in the following two paragraphs. One change was made to the boundary of SNA144 in Stuart Park. The details of each site visit or desktop analysis in response to submissions is provided in table format in Appendix 1. Where SNA boundaries were adjusted based on the outcomes from the site visits, these are shown in Appendix 2.
- 26.** Significant revisions were made to the following SNAs within Whitireia Park and Peninsula: SNA134, SNA135, SNA136, and SNA138. Large areas of gorse and exotic grassland were removed from SNA134, while contiguous areas of indigenous scrub not previously mapped were included in the SNA boundary. SNA135 has been removed in its entirety as it mostly comprises gorse shrubland. It is likely that older, lower resolution aerial photography was used to assess this area (and subsequently mapped in error as regenerating indigenous vegetation). In saying that, this area is likely to be on a successional trajectory towards indigenous vegetation based on the patterns evident in nearby areas of vegetation.
- 27.** Additional areas of indigenous vegetation have been included in the SNA boundaries of SNAs 136 and 138, the latter of which comprises a long, narrow wetland that spans across the Titahi Bay golf course.

⁴ Wildland Consultants & Kessels Ecology 2015: Assessment of Ecological Site Significance in Kāpiti Coast District Council – Methodology. Wildland Consultants Contract Report No. 3525p. Prepared for Kapiti District Council. 65 pp.

28. Amendments to the SNA boundaries as a result of the site visits and desktop analysis were made by the Wildlands GIS team in ArcGIS Pro version 2.8.2, and sent to the Porirua District Council along with the site visit reports in table format.

Policy issues

Policy issue 1: Is construction, maintenance, and upgrading walkways, cycleways and shared paths appropriate as a permitted activity when undertaken by statutory authorities in public areas covered by SNAs?

29. It is important to make the distinction between 'construction' and 'maintenance/upgrading' in the context of assessing effects.
30. The construction of paths and similar structures will likely require some form of vegetation removal, and possibly earthworks, which can generate adverse effects on ecological values. As such, the works should go through the consenting process regardless of whether they are undertaken by the statutory or regulatory authority.
31. However, maintenance/upgrading of paths generally requires less vegetation clearance (e.g., trimming, pruning, removing vegetation next to a maintained fence) and therefore has less of an impact on biodiversity. In addition, the vegetation and habitat alongside existing paths is often modified. It is appropriate for minor vegetation removal to have a permitted status as long as specific standards are met, acknowledging that consenting for maintenance can be particularly onerous. If the standards are not met the activities would need to be elevated to a consenting process so the activities can be assessed against the mitigation hierarchy.

Policy issue 2: Is there any ecological evidence that nuisance values such as noise, dust or vibration from quarrying and mining activities in the vicinity of SNA have any effect on biodiversity values within SNA?

32. Public submissions made on this issue all relate to the operational effects of the Willowbank quarry at Judgeford in relation to PCC160 (Murphy's Road Bush). For the sake of transparency, Wildland Consultants Ltd, on behalf of Porirua City Council, has recently undertaken a review of the Ecological Impact Assessment commissioned by Fulton Hogan. My involvement in the project included providing comments on the proposed biodiversity offsets package and peer reviewing all outputs prepared by other Wildlands ecologists.

33. The closest SNAs to Willowbank quarry are SNA160 and SNA151, which are approximately 700 metres to the west and 980 metres to the east respectively. In this case, I consider these distances are sufficient to render disturbance effects emanating from the quarry such as noise, vibration, and dust as negligible. In other words, proximity is a strong predictor of the magnitude of effects on local biodiversity.
34. There is some overseas evidence to suggest that dust falling on leaves of plants may cause foliar injuries and affect photosynthesis, respiration, and transpiration, which leads to decreased yield or growth (Raina *et al.* 2008; Saini *et al.* 2011). This in turn can lead to a decline in plant diversity and adversely affect ecosystem functions such as dispersal and pollination (Omoroa and Kuukkanen 2011). In Malawi, Missanjo *et al.* (2015) demonstrated that the effects of dust on plant diversity and photosynthesis diminished with increasing distance from the study quarry, with effects found to be negligible between 750-1000 metres from the quarry.
35. This body of research suggests that dust could potentially affect indigenous vegetation in SNAs in close proximity (<750 metres away) to quarries in New Zealand. However, properly regulated quarries in New Zealand are required to undertake regular dust control by watering down exposed surfaces such as haul roads and installing wheel wash facilities. Rainfall is also another factor to consider, particularly in the context of Porirua District, which experiences significant rainfall and has an annual average of around 926 millimetres⁵. Frequent rainfall would significantly reduce the risk of dust adversely affecting foliage.
36. Rather than affecting vegetation, I consider the potential adverse effects of dust on waterways to be of greater importance with regard to quarries in New Zealand, given that (i) dust is readily mobilised by the wind and deposited onto water surfaces as fine sediments and (ii) heavy rainfall can convey significant quantities of dust-derived sediment into watercourses, particularly if there is a failure of the sediment control devices. At one Auckland quarry, I have seen first-hand how dust from a recently created scree slope resulted in fine sediments being deposited onto the stream bed of a high-quality stream that bounds the quarry. Such effects may adversely impact watercourses both within and outside of SNAs.
37. There is little evidence that near-continuous quarry noises such as trucks and processing machinery have any adverse effects on indigenous birds in New Zealand. I have spent extended periods surveying vegetation and fauna adjacent to large

⁵ <https://en.climate-data.org/oceania/new-zealand/wellington/porirua-1004/>

quarries in the Auckland Region where I commonly observed bird species such as tūī, kererū, grey warbler, fantail, and silvereye utilising forested habitats in close proximity to the quarries. I have also captured and relocated forest geckos from within metres of a quarry pit, although I acknowledge that geckos are far less mobile than birds. I am reasonably confident that most bird species habituate to frequent noises, much like birds do in urban settings with regards to traffic and other anthropogenic noise. There is also overseas research that indicates some species of birds (e.g., blackbird) compensate for noise pollution by increasing their frequency and amplitude when singing (Nemeth *et al.* 2012). It is possible that some New Zealand bird species do the same where constant anthropogenic noise is present.

38. In my opinion, the noise and vibration from blasting, which is undertaken by quarries on an occasional basis to break rock for excavation, has a greater propensity than background quarry noise to disturb birds, particularly when birds are breeding and nesting. If 'Threatened' or 'At Risk' bird species are known to live in close proximity to quarries (including wetland birds such as matuku/Australasian bittern), blasting should be minimised as much as possible during the bird breeding season, particularly in close vicinity to known nesting sites or breeding colonies.

Policy issue 3: Should the same rules apply for both indigenous and non-indigenous vegetation removal in Significant Natural Areas?

39. Submissions by the Department of Conservation, Greater Wellington Regional Council, the Royal Forest and Bird Protection Society, and Queen Elizabeth the Second National Trust have emphasised the importance of non-indigenous habitats for indigenous fauna species with respect to vegetation removal in SNAs (rule ECO-R2). They generally contend that exotic vegetation can have significant habitat value for indigenous fauna and that the removal of exotic vegetation should only be permitted where there is no adverse effect on indigenous biodiversity within SNAs. My response addresses vegetation within terrestrial SNAs given that wetlands have a higher level of protection under the National Environmental Standards for Freshwater (NES-FW) and the Proposed Natural Resources Plan (PNRP).
40. Non-indigenous vegetation frequently occurs in SNAs in the Porirua District. Examples include gorse shrubland that is being succeeded by indigenous plant species, discrete areas of pine forest and rank grassland, and exotic shrubs and trees that occur within predominantly indigenous areas. I agree with the submitters that such non-indigenous vegetation, including pest plant species, can support a range of indigenous fauna species, including those classified as 'Threatened' and 'At Risk'. Examples include

long-tailed bats (Threatened – Nationally Critical) roosting in exotic trees such as pine, willow and eucalyptus; skinks species residing in rank exotic grassland; the giant land snail *Powelliphanta traversi* (Threatened – Nationally Endangered) living under dense layers of tradescantia; and seabirds nesting under pampas tussocks.

41. The mechanical or manual removal of any vegetation from SNAs, including pest plants, has the potential to damage indigenous biodiversity through actions such as crushing, creating new forest edges, and creating gaps that can be invaded by light-demanding pest plant species. Effects include damage to surrounding indigenous vegetation, the loss of habitat for indigenous fauna, the creation of light gaps that facilitate the invasion of pest plant species, and a decline in integrity of SNAs through fragmentation and/or removal of buffering/linkage functions.
42. Wilding conifer species such as radiata pine and European larch are listed as Progressive Containment pest plants in the Wellington Regional Pest Management Plan (2019-2039) and the Consolidated List of Environmental Weeds in New Zealand (Howell 2008)⁶. Given the height and mass they can reach, both as individual trees and stands of trees, and the fact that they can support threatened species such as long-tailed bats, the mechanical removal of these species has a higher propensity to adversely affect indigenous biodiversity than most other exotic plant species. I suggest that the removal of large exotic trees (for example, over 8 metres in height or 500 millimetres in diameter) should be a Permitted activity so long as certain standards are met. Less impactful methods of control should be encouraged as an alternative to felling, including techniques such as ring-barking and poisoning⁷.
43. Similarly, there should be a limit on the amount (area in m²) of woody non-indigenous vegetation – that meets the aforementioned size threshold - that can be removed from SNAs as a Permitted activity (for example 100 m²). Above this limit, an activity would require consent. I consider this to be of particular importance due to the potential for large areas of core SNA habitat to be cleared under Permitted status (see examples in Appendix 3).
44. The guidelines I have outlined in paragraphs 42 and 40 43 with Part 3.9 of the Draft National Policy Statement for Indigenous Biodiversity (Managing adverse effects on

⁶ Howell C. 2008: Consolidated List of Environmental Weeds in New Zealand. Department of Conservation Research & Development Series 292. 42 pp.

⁷ These methods should only be undertaken where public safety is not at risk.

SNAs). Specifically, a considered approach to the removal of non-indigenous vegetation in SNAs will help to avoid the following:

- i. disruption to sequences, mosaics, or ecosystem function;
- ii. fragmentation or loss of buffering or connectivity within the SNA and between other indigenous habitats and ecosystems; and
- iii. a reduction in population size or occupancy of threatened species using the SNA for any part of their life cycle.

Policy issue 4: Should earthworks do not occur within any area previously identified as significant habitats of indigenous fauna

- 45.** Under Rule ECO-R4 it is a Permitted Activity to carry out earthworks within a SNA where:
- The earthworks do not involve the removal of any indigenous vegetation; or
 - Are for the maintenance of existing public walking or cycling access tracks, as carried out by Porirua City Council, Greater Wellington Regional Council, or their nominated contractor or agent; and
 - The earthworks do not occur within any wetland.
- 46.** The clearance of indigenous vegetation within SNAs is addressed in Rule ECO-R1. In my opinion, peripheral exotic vegetation such as rank grass would be the habitat type most likely to be affected by earthworks within SNAs. It is well-documented that rank grass can provide locally important habitat for terrestrial skink species such as northern grass skink in the Wellington Region (Gollin 2016; Bell 2019). Lizard habitat values of rank grass are likely to be high, particularly where rank grass bounds indigenous shrubland, scrub, or forest in a SNA. Unless these areas are regularly mown/maintained for amenity purposes, or regularly grazed, there is justification for undertaking a preliminary lizard survey prior to the commencement of earthworks. If indigenous lizards are detected, lizard management protocols will need to be implemented.
- 47.** Any SNA that has been identified as supporting terrestrial skink and gecko species should be considered as a potential 'significant habitat of indigenous fauna', particularly if they support unmanaged areas of rank grassland that are contiguous with established indigenous vegetation. A list of such SNAs is provided in the table below:

SNA number	SNA name
SNA011	Bell's Bush
SNA018	Pukerua Bay - Wairaka Coastal Fringe
SNA027	Whenua Tapu Highway Forest
SNA031	Pukerua Bay South Coastal Scarp
SNA035	Karehana Bay Bush
SNA038	Motuhara Bush
SNA054	Ngatitoa Domain Dunes
SNA058	Camborne Inlet Scarp
SNA076	Eastern Whitby Kānuka Forest
SNA088	Whitby West Bush
SNA095	Ivey Bay Bush
SNA097	Paremata Kānuka Bush
SNA106	Aotea Lagoon
SNA117	Bothamley Park
SNA121	Bromley View Bush
SNA130	Porirua Scenic Reserve
SNA139	Whitireia Peninsula Coastal Margin
SNA140	Titahi Bay Beach
SNA147	Mana Island
SNA169	Mulherns Bush
SNA201	Upper Kakaho Treefern Bush

48. The risk of adverse effects on lizard habitats from walking and cycle track maintenance and upgrading in SNAs containing a 'significant habitat of indigenous fauna' would be low as these areas are not core habitat for lizards, subject to thresholds around the scale of the activity.

Conclusion

49. Site visits were undertaken to 19 private properties and one area of publicly-owned land to review and refine the extent of SNA boundaries between 12 July and 21 September. Vantage point surveys and desktop analysis using aerial imagery were undertaken for ten additional properties where access was not available or where a site visit was not considered necessary.

- 50.** As a result of the site visits and desktop analysis, 20 private properties had SNA boundaries amended, three private properties had SNAs entirely excluded, and the SNA boundaries remained unchanged on nine private properties. Numerous amendments were made to the SNA boundaries in Whitireia Park and Peninsula and one amendment was made to SNA144 in Stuart Park.
- 51.** Policy advice was provided in relation to submissions on rules ECO-R2 and ECO-R4 (vegetation removal and earthworks within SNAs, respectively), some of which has been incorporated into the Section 42a report.

Dated 24 September 2021

Nicholas Paul Goldwater

REFERENCES

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APPENDIX 1

Schedule of submitter-requested site visits conducted in July, August and September 2021 and ecologists' recommendations regarding SNA boundaries for each of the properties visited.

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA004	144 Muri Road, Pukerua Bay	Pt Pukerua 3C1A and Pt Pukerua 3C1B1	Pamela Meekings-Stewart	29 July 2021	<ol style="list-style-type: none"> 1. Kānuka forest and scrub 2. Regenerating kānuka-mānuka shrubland 3. Kohekohe forest with frequent to occasional ngaio, puka, tītoki, kaikōmako, coastal tree daisy, kānuka, mānuka, wharangi, and mataī. 4. Gorse shrubland 	<p>General comments: The vegetation at the property comprises part of moderately large remnant of forest characterised by kānuka forest and shrubland on hills and kohekohe forest in gullies. Most of the vegetation is protected under Department of Conservation covenants. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Kohekohe forest is representative of original vegetation types in the Wellington region. Kohekohe forest is under-protected in the Porirua District (less than 20% protected) and less than 30% of the original extent of this forest type remains in the Wellington region.</p> <p>Although not listed in the original significance assessment, the areas of more established kānuka forest and scrub are considered to be representative of current vegetation types, which are rare and poorly protected in the Porirua District (less than 20% protected).</p> <p>Criterion RPS23B – Rarity: Contains indigenous vegetation on Acutely Threatened land environments.</p> <p>Criterion RPS23D – Ecological context: The site is likely to enhance connectivity between other sites in the Pukerua Bay area and provide important bird habitat.</p> <p>Criterion RPS23E – Tangata Whenua Values: Contains karaka which may have been originally planted by early Māori.</p>	<p>Action: Minor edits have been made to the SNA boundary to remove exotic species (e.g., grey willow forest), planted areas, and a small clearing with a building. A farm track that provides access between two forest remnants has been removed from the SNA layer at the landowner's request.</p> <p>One small area has been added to the SNA, which comprises ngaio and mamaku contiguous with existing indigenous SNA vegetation.</p> <p>I recommend this submission point be accepted in part.</p>
SNA015	59 Haunui Road, Pukerua Bay	Lot 1 DP 6670	Gabriel Davidson	5 August 2021	<ol style="list-style-type: none"> 1. Brush wattle-cape ivy scrub. Some taupata present. 2. Taupata-mānuka-wharariki scrub with pōhuehue (<i>Muehlenbeckia complexa</i>). 3. Wharariki flaxland on slopes of incised gully. 	<p>General comments: Parts of SNA015 on the property near the existing tent site and deck are dominated by cape ivy and brush wattle. The overall vegetation height within the property is c.0.5-1.5 m tall. The south eastern parts of the property slope towards, but are not immediately adjacent to, a stream running into the ocean at Pukerua Bay. The entire site is downstream of a riparian <i>Carex geminata</i> wetland that occurs within SNA015 further to the south. There are no indigenous trees above 3 m in height within the portion of SNA015 that falls within this property. The retained areas of SNA015 meet the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Representative of coastal scrub, a vegetation type that is uncommon in the Porirua District, i.e., less than 30% remaining.</p> <p>Criterion RPS23B – Rarity: Contains indigenous vegetation in a land environment that has 10-20% of indigenous cover left.</p> <p>Criterion RPS23C – Ecological context: Provides connectivity with Pukerua Bay coast.</p>	<p>Action: The boundary of SNA015 has been adjusted to exclude the area of brush wattle-cape ivy scrub where it occurs on the property.</p> <p>I recommend this submission point be accepted.</p> <p>This property has been removed from Schedule 8 'Urban Environment Allotments' of the PDP.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA027	153b Rawhiti Road, Pukerua Bay	Lot 2 DP 51486	Grant Abdee	30 July 2021	Māhoe-dominant forest with frequent kānuka and occasional kohekohe, ngaio, karaka, tarata, and houpara. Kawakawa is common in the understorey with frequent hangehange, shining spleenwort.	<p>General comments: The vegetation at the property forms part of a narrow strip of indigenous broadleaved forest and treeland that bounds SH1 and the railway. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Broadleaved species forest is representative of a current indigenous vegetation type that is poorly represented in the Porirua District.</p> <p>Criterion RPS23B – Rarity: Supports one At Risk plant (puha; <i>Sonchus kirkii</i>), one At Risk reptile species (barking gecko) and one regionally scarce bird species (bellbird). Contains indigenous vegetation on Acutely Threatened and Chronically Threatened land environments.</p> <p>Criterion RPS23D – Ecological context: Significant for enhancing forest connectivity inland from Pukerua Bay, and for buffering first- and second-order reaches of the Taupo Stream.</p>	<p>Action: The SNA boundary has been amended to exclude garden side area of pōhutukawa, including trunks, plantings of rengarenga, and some areas under-planted with clivias if under the pōhutukawa canopy. Retained trunk of large ngaio.</p> <p>I recommend this submission point be accepted.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP requires amendment as a result of the site visit.</p>
SNA032	Hongoeka 4A, Hongoeka Bay Road, Hongoeka, Porirua City	Hongoeka 4a	Kathleen Ashton	23 July 2021	<ol style="list-style-type: none"> 1. Pampas-broom / vetch shrubland. 2. Bare gravel and cobbles. Appears to be used frequently for walking and vehicle access. 3. <i>Kunzea robusta</i> - māhoe-kawakawa forest with <i>Kunzea amathicola</i> nearer the coastal fringes wilding pines and wattle. Includes a narrow transition zone from coastal scrub dominated by <i>Coprosma propinqua</i>, kawakawa, <i>Veronica stricta</i> var. <i>macroaura</i>, and wharariki. 	<p>General comments: The vegetation at the property comprises part of a large SNA that covers the Hongoeka Peninsula and extends inland to the east. The area of SNA viewed on the property meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Contains elements representative of Singers and Rogers (2014) CL3, <i>Coprosma</i>, <i>Muehlenbeckia</i> shrubland.</p> <p>Criterion RPS23B - Rarity: This part of the SNA contains the 'Threatened-Nationally Vulnerable' tree <i>Kunzea amathicola</i>.</p> <p>Criterion RPS23C – Diversity: The SNA supports a good diversity of habitat types, including a transition zone between coastal scrub and forest.</p> <p>Criterion RPSD - Ecological context: Provides connectivity between coastal and lowland ecosystems.</p>	<p>Action: Site boundary amended to remove modified foreshore area (Vegetation Types 1 and 2) that was used by the adjacent quarry. Only a narrow strip of vegetation is present, which appears to be dominated by exotic species.</p> <p>I recommend this submission point be accepted.</p>
SNA032	53 Coroglen Rise, Porirua	Lot 13 DP 88001	Ian and Helen Gear	13 July 2021	Kānuka forest and scrub.	<p>General comments: The vegetation at the property comprises part of a very large SNA that extends west to the coast and encompasses a range of habitat types. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Kānuka forest and scrub are representative of current ecosystem types that are now poorly represented in the Porirua District.</p> <p>Criterion RPS23B – Rarity: Coastal parts of the SNA support Threatened and At Risk seabird species. Forested habitats support bellbird (regionally scarce), which is likely to be present at the subject property.</p>	<p>Action: Minor adjustment made to the SNA boundary to remove small area of kānuka treeland outside of the fence line. This area is grazed and has a fragmented canopy.</p> <p>I recommend this submission point be accepted.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
						<p>Contains indigenous vegetation on Acutely Threatened and Chronically Threatened land environments.</p> <p>Criterion RPS23C – Diversity: The SNA supports a good diversity of habitat types including remnant and regenerating patches of broadleaved species forest or scrub, mānuka/kānuka scrub-forest, māhoe, mamaku, and ngaio forest, flaxland/rockland ecosystems, grassland ecosystems and gravel/stonefield ecosystems.</p> <p>Criterion RPS23D – Ecological context: Part of an extensive forest tract that enhances connectivity between Karehana, Hongoeka Bay and the rural land behind it.</p>	
SNA035	82 Cluny Road, Plimmerton	Lot 1 DP 368896	Murry Cave & Susan Pickering	N/A – desktop survey undertaken	The property was viewed from the road and only part of the vegetation could be seen. Indigenous plants species include kohekohe, kōhūhū, hangehange, māhoe, ngaio, māpou, and tītoki.	<p>General comments: The vegetation at the rear of the property occurs on the boundary of a large SNA, which is part of a Key Native Ecosystem that supports stands of remnant tawa-kohekohe forest with emergent pukatea, miro, mataī and rewarewa, which are adjoined and often buffered by areas of kānuka and mānuka scrub. The SNA meets the following criteria:</p> <p>Criterion RPS23A – Representativeness: Representative of Singers and Rogers (2014) MF6, Kohekohe, tawa forest, which is no longer commonplace and is under-protected in the Wellington region. Kānuka and mānuka scrub are representative of current vegetation types, which are rare and poorly protected in Porirua City (<20% protected).</p> <p>Criterion RPS23B – Rarity: Provides habitat for one Threatened, two At Risk and one regionally declining plant species; four At Risk and one regionally scarce bird species; two At Risk fish species; and one At Risk reptile species. Contains indigenous vegetation on Acutely Threatened and Chronically Threatened land environments.</p> <p>Criterion RPS23BC– Diversity: Supports a good diversity of plant and animal species.</p> <p>Criterion RPS23D – Ecological context: Provides stepping stone habitats for birds which enhances connectivity between Karehana Bay and the rural land behind it.</p>	<p>A site visit was not permitted by the submitter, so a desktop survey has been undertaken using recent high resolution aerial photography.</p> <p>The submitter is of the opinion that the boundary of the SNA should be amended to align with his cadastral boundary. He refers to the methodology for mapping SNAs in a report prepared by Wildland Consultants in 2018 (Contract Report No. 4391) whereby small overlaps (i.e., less than five metres) comprising overhanging branches and/or early successional indigenous vegetation and/or exotic plant species could be removed in order to align the SNA and property boundaries. These areas would also include areas that do not provide a significant buffer to the SNA, e.g., planted shrubs, lawn.</p> <p>It is evident from the aerial photography that the vegetation mapped as SNA within the boundary of 82 Cluny Road comprises established indigenous species rather than early successional indigenous or exotic species. The overlap also far exceeds the threshold of 5 metres as outlined in the Wildlands report. Importantly, the report states that <i>“the overlap was retained if it contains significant or old indigenous trees, or contained a point location for a threatened species, or to retain ecological cohesiveness and functions (such as connectivity, buffering, and corridors).”</i></p> <p>In the case of 82 Cluny Road, the retention of the overlap is justified as it contributes to the ecological cohesiveness of the SNA, i.e., its removal would likely result in edge effects and fragmentation of an already uncommon and poorly protected vegetation type.</p> <p>As such, there is no justification for amending the SNA boundary where it overlaps 82 Cluny Road.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
							<p>Submitter request not granted.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP does not require amendment as a result of the desktop assessment.</p>
SNA038	83 Motuhara Road, Plimmerton	Lot 7 DP 7028	Mark Palmer	30 July 2021	Kohekohe forest	<p>General comments: The vegetation at the property comprises part of large remnant of mature coastal forest characterised by kohekohe, tītoki, kōwhai and kānuka. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Representative of coastal kohekohe forest, which is no longer commonplace and is under-protected in the Porirua District.</p> <p>Criterion RPS23B – Rarity: Supports one regionally scarce bird species (bellbird) and two At Risk reptile species (<i>Mokopirirakau</i> "southern North Island" and barking geckos/<i>Naultinus punctatus</i>). Contains indigenous vegetation on Acutely Threatened land environments.</p> <p>Criterion RPS23D – Ecological context: Provides stepping stone habitats for birds which enhances connectivity around Plimmerton.</p>	<p>Action: SNA boundary adjusted to exclude exotic vegetation (camelia and eucalyptus).</p> <p>I recommend this submission point be accepted.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP requires amendment as a result of the site visit.</p>
SNA042	99-109 Saint Andrews Road, Plimmerton	Sec 3 SO 358892	Steve Grant	21 September 2021	<p>1. Ngaio / kawakawa-<i>Griselinia lucida</i> / cocksfoot treeland.</p> <p>2. Pine forest. From aerial photography this appears to be maintained as a hedge.</p>	<p>General comments:</p> <p>This area was viewed from public land upstream, because the submitter did not respond to the offer of a site visit by Porirua City Council. Cape pondweed (<i>Aponogeton distachyos</i>) is abundant in the section of Taupo stream viewed.</p> <p>The areas of SNA on this property that have been retained meet the following criteria:</p> <p>Criterion RPS23B – Rarity: Taupo Stream contains up to six At Risk fish species. Contains indigenous vegetation on land environments with <10 to 10-20% remaining indigenous cover.</p> <p>Criterion RPS23D – Ecological context: Significant for its role in enhancing ecological connectivity and for buffering the Taupo Stream. Both the indigenous and exotic woody vegetation types present on the riparian margin shades Taupo stream, buffering it from extreme water temperature fluctuations.</p> <p>Criterion RPS23E – Tangata Whenua Values: Taupo Swamp and Stream were an important resource for food gathering (mahinga kai), fresh water supply (wai māori), traditional healing plant (rongoā) and a source of flax for weaving (puna raranga).</p>	<p>Action: The boundaries of SNA042 have been refined to exclude the areas covering the pine canopy obvious from aerial imagery.</p> <p>I recommend this submission point be accepted.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA047	34 The Track, Plimmerton	Lot 2 DP 81242	Kristian Coppitiers	16 September 2021	<ol style="list-style-type: none"> Māhoe-kānuka forest with occasional wilding pine and eucalyptus. Māhoe-kānuka scrub. Eucalyptus forest. Chestnut orchard with gorse, young māhoe, and mānuka. Pine nut orchard with gorse, young māhoe, and mānuka. Harakeke-raupō-<i>Carex</i> flaxland. 	<p>General comments: The significance criteria for SNA047 as a whole largely relate to the wetland feature (Taupo Swamp South) that is contiguous with terrestrial vegetation on the property. The retained area of SNA on the property meets the following criteria:</p> <p>Criterion RPS23A – Representativeness: Wetland ecosystems are no longer commonplace and poorly represented nationally and in the Wellington Region. Indigenous broadleaved forest containing a substantial amount of kānuka in the canopy is representative of a current ecosystem type that is now poorly represented in Porirua City.</p> <p>Criterion RPS23C - Diversity: Supports a natural diversity of wetland flora, and native forest and scrub associations. Contains a transition zone between wetland and dryland forest and scrub communities.</p> <p>Criterion RPS23D – Ecological context: Buffers a catchment that into the retained area of Taupo swamp in SNA047.</p>	<p>Action: The boundaries of SNA047 have been refined to exclude areas of eucalyptus forest, chestnut orchard, and pine nut orchard (Vegetation Types 3, 4 and 5).</p> <p>I recommend this submission point be accepted.</p>
SNA047	10a The Track	Lot 1 DP 86437	Paul Botha	21 September 2021	<ol style="list-style-type: none"> (Pine)-(Lawsons cypress) / māhoe kānuka forest. Māhoe-kānuka forest. Māhoe-kānuka scrub. Eucalyptus forest. Mown grassland. Citrus orchard / rank exotic grass. Karamū shrubland in a seepage. The groundcover is dominated by onion weed, nasturtium, tradescantia, <i>Juncus effusus</i>, and <i>Lotus pedunculata</i>. Mixed indigenous scrub containing planted <i>Griselinia littoralis</i>, korokio, akeake and naturally recolonised māhoe, taupata, and karamū. Harakeke-raupō-<i>Carex</i> flaxland. 	<p>General comments: The significance criteria for SNA047 as a whole largely relate to the wetland feature (Taupo Swamp South) that is contiguous with terrestrial vegetation on the property. The retained area of SNA on the property meets the following criteria:</p> <p>Criterion RPS23A – Representativeness: Wetland ecosystems are no longer commonplace and poorly represented nationally and in the Wellington Region. Indigenous broadleaved forest containing a substantial amount of kānuka in the canopy is representative of a current ecosystem type that is now poorly represented in Porirua City.</p> <p>Criterion RPS23C - Diversity: Supports a natural diversity of wetland flora, and native forest and scrub associations. Contains a transition zone between wetland and dryland forest and scrub communities.</p> <p>Criterion RPS23D – Ecological context: Buffers a catchment that into the retained area of Taupo swamp in SNA047.</p>	<p>Action: The boundaries of SNA047 have been refined to exclude areas containing Vegetation Types 1, 4, 5, 6, 7 and 8. An additional area of Vegetation Type 8 to the south of the house on the property appears to have already been excluded from the SNA.</p> <p>I recommend this submission point be accepted in part.</p>
SNA058	7 Pendeen Place, Camborne	Lot 9 DP 70109	Ian and Noeline Fowler	13 July 2021 (property viewed from adjacent reserve)	Kānuka-mānuka forest up to 10m tall with occasional mānuka in the canopy.	<p>General comments: The vegetation at the property comprises part of an ecologically significant area of coastal forest with kānuka, māhoe, and ngaio prominent in the canopy. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Kānuka forest and scrub are representative of current</p>	<p>Viewed vegetation behind houses via the reserve and also inspection of aerial photography.</p> <p>No justification for adjusting the SNA boundary.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
						<p>vegetation types, which are rare and poorly protected in the Porirua District (less than 20% protected).</p> <p>Criterion RPS23B – Rarity: One 'At Risk - Declining lizard' species reported (barking gecko). Contains indigenous vegetation on Acutely Threatened land environments (less than 10% indigenous vegetation remaining).</p> <p>Criterion RPS23D – Ecological context: Provides an important coastal buffer and forms part of an extensive wildlife corridor along the Pauatahanui Inlet.</p>	<p>I recommend this submission point be rejected.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP does not require amendment as a result of the site visit.</p>
SNA058	5 Pendeen Place, Camborne	Lot 10 DP 70109	Caryl Fantham	13 July 2021 (property viewed from adjacent reserve)	Kānuka-mānuka forest up to 10m tall with occasional mānuka in the canopy.	<p>General comments: The vegetation at the property comprises part of an ecologically significant area of coastal forest with kānuka, māhoe, and ngaio prominent in the canopy. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Kānuka forest and scrub are representative of current vegetation types, which are rare and poorly protected in the Porirua District (less than 20% protected).</p> <p>Criterion RPS23B – Rarity: One 'At Risk - Declining lizard' species reported (barking gecko). Contains indigenous vegetation on Acutely Threatened land environments (less than 10% indigenous vegetation remaining).</p> <p>Criterion RPS23D – Ecological context: Provides and important coastal buffer and forms part of an extensive wildlife corridor along the Pauatahanui Inlet.</p>	<p>Viewed vegetation behind houses via the reserve and also inspection of aerial photography.</p> <p>Action: Minor adjustment made to the SNA boundary to remove small clearing behind 5 Pendeen Place.</p> <p>I recommend this submission point be accepted in part.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP does not require amendment as a result of the site visit.</p>
SNA058	3 Pendeen Place, Camborne	Lot 11 DP 70109	David Thomson	13 July 2021 (property viewed from adjacent reserve)	Kānuka-mānuka forest up to 10m tall with occasional mānuka in the canopy.	<p>General comments: The vegetation at the property comprises part of an ecologically significant area of coastal forest with kānuka, māhoe, and ngaio prominent in the canopy. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Kānuka forest and scrub are representative of current vegetation types, which are rare and poorly protected in the Porirua District (less than 20% protected).</p> <p>Criterion RPS23B – Rarity: One 'At Risk - Declining lizard' species reported (barking gecko). Contains indigenous vegetation on Acutely Threatened land environments (less than 10% indigenous vegetation remaining).</p> <p>Criterion RPS23D – Ecological context: Provides and important coastal buffer and forms part of an extensive wildlife corridor along the Pauatahanui Inlet.</p>	<p>Viewed vegetation behind houses via the reserve and also inspection of aerial photography. No justification for adjusting the SNA boundary.</p> <p>I recommend this submission point be rejected.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP does not require amendment as a result of the site visit.</p>
SNA062	271 Grays Road, Paekakariki Hill	Lot 3 DP 332721	Hannah Gray	16 September 2021 (site viewed from Hannah Grey's property)	N/A - historical meandering of the river was confirmed during the site visit.	<p>SNA062 meets the following significance criteria:</p> <p>Criterion RPS23B – Rarity Criterion RPS23D – Ecological context</p>	<p>Action: Amend the description of this SNA in Schedule 7 of the PDP to read (insertion <u>underlined</u>):</p> <p>"This site is comprised of riparian vegetation, including reeds, cabbage trees, and</p>

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							<p>broadleaved scrub, which protects the lower reaches of the Kakaho stream and is important for protecting the Porirua harbour. This site was identified in the Protected Natural Resources Plan, Schedule F1b, F2, and F4 as providing important inanga spawning habitat, important habitats for indigenous birds in the coastal marine area and as having significant indigenous biodiversity values in the coastal marine area. The At Risk-Declining inanga (<i>Galaxias maculatus</i>), longfin eel (<i>Anguilla dieffenbachii</i>), and redfin bully (<i>Gobiomorphus huttoni</i>), as well as banded kokopu (<i>Galaxias fasciatus</i>), common bully (<i>Gobiomorphus cotidianus</i>), common smelt (<i>Retropinna retropinna</i>), giant bully (<i>Gobiomorphus gobioides</i>), grey mullet (<i>Mugil cephalus</i>), and shortfin eel (<i>Anguilla australis</i>) have all been recorded from this site. Kakaho stream was previously known as Kahao stream (1980). <u>It meandered over the Kakaho Valley floor until 1949 when it was straightened.</u> Includes indigenous vegetation on Acutely Threatened land environments."</p> <p>I recommend this submission point be accepted.</p>
SNA065	329 Grays Road	Sbdn 2 SECT 87 Porirua DIST	Hannah Gray	16 September 2021	<ol style="list-style-type: none"> <i>Cyperus ustulatus</i> sedgeland with planted sterile willow cultivars and pōhutukawa. <i>Carex secta-Cyperus ustulatus-Juncus effusus</i> sedgeland with planted sterile willow cultivars. Raupō-harakeke rushland with <i>Cyperus ustulatus</i> and <i>Juncus effusus</i>. 	<p>General comments: Most of the southeastern gully delineated as SNA065 has been placed into a QEII covenant (5-07-587), and is currently a surrounded by stock-proof fencing. The area within the QEII covenant has been planted with indigenous tree and shrub species. The current area of wetland in the three gullies of SNA065 has resulted from the construction of a stock watering pond on the neighbouring property downstream over 40 years ago.</p>	<p>Action: SNA065 has been entirely removed because it does not meet the NPS-FM definition of 'natural wetland', i.e., it is a constructed wetland. The current area of wetland in the three gullies has resulted from the construction of a stock watering pond on the neighbouring property downstream over 40 years ago. Because this SNA will be removed from Schedule 7 of the PDP, the site description amendment proposed by the submitter is no longer necessary.</p> <p>I recommend this submission point be accepted.</p>
SNA067	329 Grays Road	Sbdn 2 SECT 87 Porirua DIST	Hannah Gray	16 September 2021	N/A - accuracy of the proposed change to the site description was confirmed during the site visit.	<p>SNA062 meets the following significance criteria:</p> <p>Criterion RPS23A -- Representativeness Criterion RPS23B -- Rarity Criterion RPS23D -- Ecological context</p>	<p>Action: Amend the description of this SNA in Schedule 7 of the PDP to read (insertions <u>underlined</u>, deletions denoted in strike through font):</p> <p>"Lochlands Barrowside <u>Lochlands Barrowside</u> bush covenant</p> <p>An area protected by QEII covenant 5-07-587, which appears to have been <u>is</u> fenced and allowed to regenerate since 2008. The vegetation consists of natives in various developmental stages. <u>is largely unknown but</u> It contains a wetlands in</p>

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							the gully gullies and may contain some mature trees in the northern area. Protects the headwaters of an unnamed stream which flows into the Pauatahanui Inlet." I recommend this submission point be accepted.
SNA068	299, 325, and 329 Grays Road, Pauatahanui	Lot 1 DP 89940 and Lot 1 DP 44690	Christine Stanley and Alan Gray	16 September 2021	<ol style="list-style-type: none"> 1. Exotic grassland with <i>Juncus effusus</i>. Unfenced and grazed. 2. Exotic grassland. Unfenced and grazed. 3. Raupō reedland. Unfenced. 4. Indigenous-dominated planted shrubland that has been planted by the landowners about 15 years ago. Mix of kōwhai, tree lucerne, māhoe, lancewood, <i>Pittosporum ralphii</i>, <i>Pennantia corymbosa</i>, karo, harakeke, kahikatea, karaka, tōtara. Bracken and <i>Paesia scaberula</i> are present around the edges. Fenced. 	<p>General comments: The wetland areas of SNA068 are considered to meet the definition of a natural wetland under the NPS-FM because they have likely been induced by placement of a culvert underneath Greys Road at the bottom of a natural seepage. However, the current delineation of this SNA includes some areas that are not dominated by wetland plant species. The areas of SNA068 that have been retained meet the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Natural wetlands are longer commonplace and are poorly represented in the Wellington conservancy.</p> <p>Criterion RPS23B – Rarity: Natural wetlands are no longer commonplace and are poorly represented nationally and in the Wellington conservancy.</p>	<p>Action: The boundary of SNA068 has been amended to exclude areas of dry pasture (Vegetation Types 1 and 2).</p> <p>Action: Amend the description of this SNA in Schedule 7 of the PDP to read (insertions <u>underlined</u>, deletions denoted in strike through font):</p> <p><i>“Juncus</i> rushland and raupō reedland buffering an unnamed small stream draining into the Pauatahanui Estuary, containing <i>Juncus effusus</i>, giant umbrella sedge, <i>Carex sinclairii</i>, <i>Carex geminata</i>, <i>Juncus pallidus</i>, raupō, sea rush, and <i>Isolepis cernua</i>.”</p> <p>I recommend this submission point be accepted in part.</p>
SNA069	299, 325, and 329 Grays Road, Pauatahanui	Lot 1 DP 89940 and Lot 1 DP 44690	Christine Stanley and Alan Gray	16 September 2021	<ol style="list-style-type: none"> 1. Tawa-kohekohe forest. 2. Kānuka indigenous broadleaf forest. 3. Macrocarpa-eucalyptus treeland with a sparse understorey of karo, māhoe, kawakawa, and planted rengarenga lily. 	<p>General comments: Vegetation type 1 contains remnant forest. Vegetation Types 1 and 2 were grazed by cattle until the 1950s and are now fenced. These two vegetation types meet the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Representative of Singers and Rogers (2014) MF6 (kohekohe and tawa-dominated forest), which are no longer commonplace and are under-protected in the Wellington region.</p> <p>Criterion RPS23B – Rarity: Supports one At Risk plant species. Contains one uncommon vegetation type. Contains indigenous vegetation on land environments with 10-20% of indigenous cover left.</p> <p>Criterion RPS23C - Diversity: Contains diversity of forest types supporting a natural floristic diversity of later successional species.</p>	<p>Action: The area of macrocarpa-eucalyptus treeland on the road verge (Vegetation Type 3; the area proposed by the submitters as SNA069a) has been removed from SNA069.</p> <p>Action: Amend the description of this SNA in Schedule 7 of the PDP to read (insertions <u>underlined</u>):</p> <p><i>“Contiguous areas of coastal tawa-kohekohe (tawa, kohekohe, kahikatea, kanuka (presumably <i>Kunzea robusta</i>; Threatened-Nationally Vulnerable) karaka, ngaio, wharangi, and mahoe), and kanuka-broadleaved forests (kanuka, red mapou, manuka (<i>Leptospermum scoparium</i>; At Risk-Declining), kahikatea, mahoe, lancewood, tawa, five-finger, wharangi, native broom, <i>Coprosma propinqua</i>, kaikomako, kohuhu, scrub pōhuehue, and houhere), each with minor podocarp elements, including rewarewa, matai (<i>Prumnopitys taxifolia</i>; of local interest), and kahikatea (<i>Dacrycarpus dacrydioides</i>; of local interest). This site also contains kowhai forest, stands of which are uncommon in the Wellington region. Large-leaved milk tree (turepo, <i>Streblus banksii</i>; At Risk-Relict) and northern rata (<i>Metrosideros robusta</i>; Threatened-Nationally Vulnerable and of local interest) have previously been recorded from this site. Includes indigenous vegetation</i></p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
							on Chronically Threatened land environments. <u>Surrounded by Cupressus macrocarpa which act as a protective buffer.</u> I recommend this submission point be accepted.
SNA076	6 Lodestar Lane, Whitby	Lot 2738 DP 302748	Frances McNamara	30 July 2021	Kānuka forest c.5-6 metres in height dominates most of the SNA on the property.	<p>General comments: The vegetation at the property comprises a largely intact area of kānuka forest that is part of a local network of small but ecologically significant bush remnants. Sub-canopy and understorey species are relatively sparse in drier, northern parts of the site, while indigenous broadleaved shrub and vine species are locally common in small, damp gullies to the south. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Kānuka forest and scrub are representative of current vegetation types, which are rare and poorly protected in the Porirua District (less than 20% protected).</p> <p>Criterion RPS23B – Rarity: One 'At Risk - Declining lizard' species reported (barking gecko). Contains indigenous vegetation on Acutely Threatened land environments (less than 10% indigenous vegetation remaining).</p> <p>Criterion RPS23D – Ecological context: Provides stepping stone habitats for birds which enhances connectivity between forest patches in the area.</p>	<p>Action: The boundary of the SNA has been amended to exclude areas of garden planted with exotic species and to align with the edge of the forest canopy.</p> <p>I recommend this submission point be accepted in part.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP does not require amendment as a result of the site visit.</p>
SNA084	68 Exploration Way, Whitby	Lot 8 DP 519099	David and Sheryn Harpham (Progeni Ltd)	30 July 2021	<ol style="list-style-type: none"> 1. Kānuka-mānuka-māhoe-ponga forest at various stages of regeneration. 2. Kānuka scrub c.8 metres tall with a mixed indigenous broadleaved species understorey including māhoe, whauwhaupaku, hangehange, kōhūhū, horoeka, wharariki, ponga, mamaku, kanono, māpou, tarata, rangiora, koromiko, karamū, and Pseudopanax crassifolius x P. arboreus. 	<p>General comments: An area of advanced regenerating kānuka-dominant forest and scrub on lowland hills, with a moderate diversity of indigenous species in the understorey. Some sizeable areas of vegetation have recently been cleared in the south of the property.</p> <p>Criterion RPS23A – Representativeness: Kānuka-mānuka forest and scrub are representative of current vegetation types, which are rare and poorly protected in the Porirua District (less than 20% protected).</p> <p>Criterion RPS23B – Rarity: Streams within the SNA may support up to three indigenous fish species classified as 'At Risk – Declining': longfin eel, inanga, and giant kokopu.</p> <p>Criterion RPS23D – Ecological context: Provides stepping stone habitats for birds which enhances connectivity between eastern Porirua and Whitby.</p>	<p>Action: The boundary of the SNA has been amended to exclude (i) areas of indigenous vegetation that have recently been cleared and (ii) areas that are dominated by exotic species such as pine and eucalyptus.</p> <p>I recommend this submission point be accepted in part.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP does not require amendment as a result of the site visit.</p>
SNA086	24 Exploration Way, Whitby	Lot 1953 DP53935	Joanna Alderdice	4 August 2021	<ol style="list-style-type: none"> 1. Eucalyptus-pine / kānuka forest. The subcanopy and shrub layers also contain kanono, kōhūhū, <i>Fatsia japonica</i>, kawakawa, tī kōuka, <i>Pittosporum ralphii</i>, māhoe, red māpou, porokaiwhiri (pigeonwood), and <i>Hoheria populnea</i>. <i>Carex uncinata</i> 	<p>General comments: The ground layer of both vegetation types on the property is sparse, and the understorey is heavily modified. The tī kōuka have been planted by the landowner. These areas are currently managed as an urban garden and play area for children and contain several structures including a sandpit, trampoline, raised garden bed edging, and outdoor furniture. Domestic chickens are currently</p>	<p>Action: The boundary of the SNA has been amended to exclude areas that are dominated by exotic species such as pine and eucalyptus (Vegetation Type 1) and lower value kānuka treeland (Vegetation Type 2).</p> <p>I recommend this submission point be accepted.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
					<p>and clivias are present in the ground cover layer.</p> <p>2. Kānuka treeland. The subcanopy and shrub layers also contain kanono, kawakawa, <i>Pittosporum ralphii</i>, māhoe, porokaiwhiri (pigeonwood), climbing asparagus, and <i>Hoheria populnea</i>. <i>Carex uncinata</i> and clivias are present in the ground cover layer.</p>	free-ranging through both vegetation types on the property. The areas of SNA 086 where they fall on the property are not considered to meet the criteria for ecological significance.	This property has been removed from Schedule 8 'Urban Environment Allotments' of the PDP.
SNA086, SNA088	44 Exploration Way, Whitby	Lot 1767 DP 58749	Linda Southwood	N/A – desktop survey undertaken	<p>Based on site visits to neighbouring properties and inspection of aerial photography, the vegetation at the property comprises kānuka-mānuka forest and scrub.</p> <p>There is one large wilding pine emergent over the indigenous vegetation.</p>	<p>General comments: The subject property contains indigenous vegetation within two SNAs, although it is likely to be very similar in species composition and age, i.e., advanced kānuka-mānuka forest and scrub. The parts of SNA086 and SNA088 that occur on the property meet the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Contains elements of kānuka-mānuka forest and scrub, which are representative of current vegetation types are rare and poorly protected in Porirua City.</p> <p>Criterion RPS23B – Rarity: Supports one At Risk reptile species (barking gecko) and one regionally scarce bird species (bellbird). Contains indigenous vegetation on Acutely Threatened land environments ((less than 10% indigenous vegetation remaining)).</p> <p>Criterion RPS23D – Ecological context: Part of a large, contiguous tract of indigenous vegetation that provides stepping stone habitats for birds, enhancing connectivity between Whitby and Waitangirua</p>	<p>There is no justification for amending or removing the SNA boundary.</p> <p>I recommend this submission point be rejected.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP does not require amendment as a result of the desktop survey.</p>
SNA100	3 Abbey Way, Whitby	Lot 2 DP 460364	Juan Qu (further submission on 182 by Simon & Jean Jones)	N/A – desktop survey undertaken	<p>1. Kānuka treeland.</p> <p>2. Exotic grassland.</p>	<p>General comments: The vegetation at the property is contiguous with a relatively small, discrete area of regenerating indigenous vegetation bounded by houses and an urban park. Most of the property comprises exotic grassland. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Kānuka forest and scrub are representative of current vegetation types, which are rare and poorly protected in Porirua City.</p> <p>Criterion RPS23D – Ecological context: Provides stepping stone habitats for birds which enhances connectivity between forested areas around Whitby</p>	<p>Action: SNA boundary has been adjusted to exclude exotic grassland and young individual indigenous trees.</p> <p>I recommend this submission point be accepted in part.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP requires amendment as a result of the site visit.</p>
SNA102	3A Solway Place, Papakowhai	Pt Lot 1 DP 81437	Graeme Walker (Samantha Montgomery Ltd)	Site viewed from vantage points on 28 July 2021	Regenerating indigenous forest and scrub dominated by kānuka and māhoe with frequent hangehange and rangiora,	<p>General comments: The vegetation at the property comprises a relatively large area of the northernmost extent of SNA102. The SNA meets the following significance criteria:</p>	<p>Action: SNA boundary has been adjusted to remove exotic species on the roadside and one pine on property.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
					<p>scattered cherry and broom, and occasional emergent radiata pine.</p> <p>Vegetation along the roadside largely comprises exotic species such as tree lucerne, gorse, tradescantia, blackberry, and agapanthus.</p>	<p>Criterion RPS23A – Representativeness: Kānuka forest and scrub are representative of current vegetation types, which are rare and poorly protected in Porirua City (<20% protected).</p> <p>Criterion RPS23B – Rarity: Provides habitat for one At Risk bird species (NZ falcon).</p> <p>Criterion RPS23D – Ecological context: Strongly enhances connectivity along Papakowhai escarpment and into Ascot Park suburb, and protects against erosion on steep slopes.</p>	<p>I recommend this submission point be accepted in part.</p>
SNA103	82 Eskdale Road, Papakowhai	Lot 91 DP 81840	Sarah Saunders (further submission on 182 by Simon & Jean Jones)	Site viewed from vantage points on 13 July 2021	<p>The vegetation at the property has been described by Boffa Miskell, the ecological consultants who were commissioned by the landowner to assess the property. Six vegetation types were identified and mapped:</p> <ol style="list-style-type: none"> 1. Australian blackwood forest and treeland. 2. Wild cherry forest and treeland. 3. Blackberry-pōhuehue vineland. 4. Mixed māhoe and low forest. 5. Māhoe-five-finger scrub and low forest. <p>Wilding pine.</p>	<p>General comments: I generally agree with the vegetation descriptions and mapping undertaken by Boffa Miskell, although I was not able to view all parts of the property from the vantage points. Inspection of recent aerial photography, however, has assisted in examining the vegetation types mapped in the submission. The report by Boffa Miskell appears to have underestimated the extent of indigenous broadleaved species such as māhoe and five-finger, particularly within Vegetation Type 2, although this has no bearing on the conclusion that most of the vegetation on the property does not meet the criteria for significance under Policy 23.</p> <p>Vegetation within the remainder of the SNA is considered to meet the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Kānuka forests are representative of current vegetation types, which are rare and poorly protected in Porirua City (<20% protected).</p> <p>Criterion RPS23B – Rarity: Provides habitat for one At Risk bird species (NZ falcon).</p> <p>Criterion RPS23D – Ecological context: Although fragmented and threatened by weed invasion, the site still significantly enhances connectivity as it spans several adjoining hillslopes.</p>	<p>Action: Vegetation dominated by exotic species has been removed from the SNA, including emergent radiata pine.</p> <p>I recommend this submission point be accepted with the exception of very small areas of contiguous indigenous vegetation, which are to remain in the SNA.</p>
SNA104	44 Tweed Road, Papakowhai	Lot 39 DP 40605	Anthony Brandon	29 July 2021	Brush cherry-cotoneaster-koromiko cultivar scrub.	N/A	<p>Action: SNA boundary has been amended to remove the exotic species and indigenous cultivars that largely occupy the rear garden. The SNA boundary is now aligned with the property boundary.</p> <p>I recommend this submission point be accepted.</p> <p>This property has been removed from Schedule 8 'Urban Environment Allotments' of the PDP.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA130	25 Waiho Terrace, Elsdon	Lot 50 DP 19438	Phyllis Sexton	30 July 2021	Tawa-māhoe-kohekohe forest.	<p>General comments: The vegetation at the property comprises part of a tract of high-quality lowland broadleaved species-podocarp forest, which is the largest contiguous area of indigenous forest remaining in the Porirua District. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Coastal kohekohe-podocarp and semi-coastal tawa-podocarp forest are regionally uncommon and this SNA comprises the best remaining representative examples of these forest types in the Wellington region.</p> <p>Criterion RPS23B – Rarity: Supports one threatened plant species (<i>Leptinella nana</i>; Threatened – Nationally Critical) and a range of At Risk bird, fish and reptile species including bush falcon, and North Island kākā whitehead, red-crowned parakeet, longfin eel, barking gecko and <i>Mokopirirakau</i> "southern North Island". Bellbird (regionally scarce) and one species of carnivorous snail (<i>Wainua urnula</i>) have also been recorded from the SNA.</p> <p>Criterion RPS23C – Diversity: The flora includes more than 180 indigenous species, including more than 60 species of fern, and 14 species of orchid. Also contains an altitudinal vegetation sequence. Nineteen species of forest bird are known from the KNE, plus a range of fish species, lizard species and Wainuia snail.</p> <p>Criterion RPS23D – Ecological context: Part of a series of forest and indigenous scrub sites that link to the Wellington Outer Green Corridor, Porirua Harbour and reserves surrounding Porirua Harbour.</p> <p>Criterion RPS23E – Tangata Whenua Values: Identified in the Proposed Natural Resources plan, Schedule C3, as a site of significance to Ngāti Toa Rangātira and has a long historic association with Takapuwahia Marae. Plant material is allowed to be collected from this site for rongoā māori.</p>	<p>No justification for adjusting the SNA boundary.</p> <p>I recommend this submission point be rejected.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP does not require amendment as a result of the site visit.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA128	Raiha Street	Lot 12 DP 312536	Remi Leblanc	28 July 2021	Māhoe-dominated regenerating low forest and scrub with understorey dominated by <i>Coprosma grandifolia</i> . Some weeds are present, but mainly on edge.	<p>General comments: The vegetation at the property comprises part of a moderate-sized bush remnant characterised by māhoe-dominated regenerating low forest and scrub. The SNA meets the following significance criteria:</p> <p>Criterion RPS23B – Rarity: Supports one regionally scarce bird species (bellbird). Contains indigenous vegetation on Acutely Threatened land environments.</p> <p>Criterion RPS23D – Ecological context: Significant for connectivity role in the fragmented lowland zone between the Porirua Basin and Rangituhi Reserve / Spicer Forest Hill areas.</p>	<p>No justification for removing the site as an SNA.</p> <p>Action: Minor boundary adjustment made to exclude pines.</p> <p>I recommend this submission point be rejected.</p>
SNA130	100 Rangituhi Crescent, Takapuwahia	Lot 2 DP 30662	Ian Wells	N/A – desktop survey	Inspection of aerial and street view photography indicates that the vegetation that intersects the rear of the property comprises intact māhoe-dominant forest with occasional ngaio, rewarewa, kānuka, and <i>Pittosporum</i> species. No exotic species were evident.	<p>General comments: The vegetation at the property comprises part of a tract of high-quality lowland broadleaved species-podocarp forest, which is the largest contiguous area of indigenous forest remaining in the Porirua District. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Coastal kohekohe-podocarp and semi-coastal tawa-podocarp forest are regionally uncommon and this SNA comprises the best remaining representative examples of these forest types in the Wellington region.</p> <p>Criterion RPS23B – Rarity: Supports one threatened plant species (<i>Leptinella nana</i>; Threatened – Nationally Critical) and a range of At Risk bird, fish and reptile species including bush falcon, and North Island kākā whitehead, red-crowned parakeet, longfin eel, barking gecko and <i>Mokopirirakau</i> "southern North Island". Bellbird (regionally scarce) and one threatened species of carnivorous snail (<i>Wainua urnula</i>) have also been recorded from the SNA.</p> <p>Criterion RPS23C – Diversity: The flora includes more than 180 indigenous species, including more than 60 species of fern, and 14 species of orchid. Also contains an altitudinal vegetation sequence. Nineteen species of forest bird are known from the KNE, plus a range of fish species, lizard species and Wainuia snail.</p> <p>Criterion RPS23D – Ecological context: Part of a series of forest and indigenous scrub sites that link to the Wellington Outer Green Corridor, Porirua Harbour and reserves surrounding Porirua Harbour.</p> <p>Criterion RPS23E – Tangata Whenua Values: Identified in the Proposed Natural Resources plan, Schedule C3, as a site of significance to Ngāti Toa Rangātira and has a long historic association with Takapuwahia Marae. Plant material is allowed to be collected from this site for rongoā māori.</p>	<p>No justification for amending the SNA boundary.</p> <p>I recommend this submission point be rejected.</p> <p>Schedule 8 'Urban Environment Allotments' of the PDP does not require amendment as a result of the site visit.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA134	Whitireia Park and Peninsula	Sec 4 SO 446704, Pt Lot 1 DP 10900, Sec 40 Blk VIII Paekakari ki SD	Titahi Bay Community Group and Pest Free Titahi Bay (Joel de Boer and Abbe Holmes), Luke Davia, Robyn Smith	14 July 2021	<p>1. Low stature māhoe scrub with frequent karo, occasional kānuka, mānuka and gorse, and scattered karamū on hills and spurs.</p> <p>2. Gorse scrub with frequent boneseed on hills and spurs.</p> <p>3. <i>Carex geminata</i> sedgeland with occasional harakeke, toetoe, and emergent tī kōuka in incised gullies.</p>	<p>General comments: The vegetation surveyed during the site visit is part of a large remnant of regenerating coastal forest and scrub that contains freshwater wetlands and is contiguous with areas of saltmarsh habitat. Following the site visit, it was apparent that large areas of gorse scrub are present throughout the SNA, although these areas are being progressively succeeded by indigenous seral species such as māhoe, karamū, and kānuka. The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Representative of coastal broadleaved forest and both freshwater and saltwater wetlands.</p> <p>Criterion RPS23B – Rarity: The SNA supports two Threatened and nine At Risk bird species and two At Risk fish species. Wetlands are nationally rare (<10% of their original extent remains) and a regionally uncommon habitat type. Contains indigenous vegetation on Acutely Threatened land environments.</p> <p>Criterion RPS23C – Diversity: Supports a natural diversity of ecosystems, including a terrestrial-freshwater-saline ecological sequence.</p> <p>Criterion RPS23D – Ecological context: Enhances connectivity in the Titahi Bay area and buffers the Onepoto arm of the Porirua Harbour.</p>	<p>Action: The SNA boundary has been amended to exclude large areas of gorse and rank grass to the east of the walking track, and also to add narrow tongues of indigenous vegetation, including wetlands on gully floors. In addition, the coastal boundary of the SNA has been amended to include saltmarsh habitat as per the submitters' request (and was verified during the site visit).</p> <p>The boundary of the smaller remnant of the SNA to the east has been amended to include contiguous indigenous vegetation and exclude gorse shrubland.</p> <p>I recommend this submission point be accepted in part.</p>
SNA135				12 July 2021	<p>1. Gorse scrub and shrubland on hills.</p> <p>2. Regenerating indigenous scrub in gullies (likely to comprise māhoe, karamū, and kānuka).</p>	<p>General comments: It is apparent from the site visit and inspection of aerial photography that most of this comprises gorse scrub and shrubland, with only narrow ribbons of indigenous vegetation present in the gullies.</p> <p>The site was assessed as meeting the following the significance criteria:</p> <p>Criterion RPS23B – Rarity: Contains indigenous vegetation on Chronically Threatened land environments.</p> <p>Criterion RPS23D – Ecological context: Has significant connectivity values along Whitireia Peninsula coast.</p>	<p>Action: The site has been removed from the SNA layer given it dominated by gorse. The existing areas of indigenous vegetation are too small and fragmented to meet any significance criteria.</p> <p>No specific request from submitter regarding this SNA.</p>
SNA136				12 July 2021	<p>Existing SNA:</p> <p>1. Coastal kohekohe-karaka forest with frequent to occasional mānuka, taupata, ngaio, māhoe, tītoki, tawa, wharangi, tī kōuka, <i>Coprosma areolata</i>, kānuka, and kaikōmako.</p> <p>2. Planted harakeke-toetoe-tī kōuka-rank grass flaxland.</p>	<p>General comments: This existing SNA was only partially viewed from the coastal edge (i.e., within in the planted flaxland). The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Representative of 'MF6, Kohekohe, tawa forest', which is no longer commonplace and are under-protected in the Wellington region.</p> <p>Criterion RPS23B – Rarity: Supports one At Risk plant species (<i>Streblus banksii</i>).</p>	<p>Action: The SNA boundary has been amended to (i) include contiguous indigenous vegetation; (ii) include a small area of planted harakeke flaxland; and (iii) include the proposed SNA extension (refer to map).</p> <p>I recommend this submission point be accepted in part.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
					<p>Proposed SNA extension:</p> <ol style="list-style-type: none"> 1. Ngaio-<i>Olearia paniculata</i>-<i>Coprosma propinqua</i>-taupata scrub with frequent to occasional harakeke, tī kōuka, toetoe, and gorse. 2. 2. Kānuka scrub. 	<p>Criterion RPS23D – Ecological context: Enhances connectivity within Whitireia Park scrub and forest habitats.</p> <p>The proposed SNA extension comprises a discrete remnant of coastal broadleaved scrub located approximately 200 metres to the east of the SNA136.</p> <p>Vegetation within the proposed SNA extension is considered to meet Criterion RPS23A – Representativeness (representative of mixed broadleaved coastal scrub, a vegetation type that is uncommon in the Porirua District, i.e., less than 30% remaining) and Criterion RPS23A – Ecological context (enhances connectivity within Whitireia Park scrub and forest habitats).</p>	
SNA137				N/A	N/A	N/A	<p>The submitter has noted that the current SNA mapping does not clearly distinguish between SNA137 and SNA139, i.e., they appear to be contiguous.</p> <p>Action: Upon inspection of the SNA boundaries using the PCC ArcGIS viewer, Wildlands can confirm that changes to the boundaries are required. A small section of the northern extent of SNA137 - which mainly comprised the coastal road - has been removed and the eastern boundary has been widened to include more of the rocky platform.</p> <p>I recommend this submission point be accepted.</p>
SNA138				12&14 July	<ol style="list-style-type: none"> 1. Spike sedge-Yorkshire fog sedgeland with local <i>Carex secta</i> and occasional harakeke, giant umbrella sedge, tī kōuka, paspalum, creeping bent, and creeping buttercup. 2. <i>Carex geminata</i> sedgeland with occasional giant umbrella sedge and local toetoe and <i>Carex virgata</i>. 3. Pōhuehue-kokihi vineland with local <i>Diplazium australe</i>, spike sedge and Yorkshire fog along the stream margins. Ngaio is local on the upper banks with occasional māhoe and kawakawa. 	<p>General comments: The site comprises an extensive spring fed wetland gully system that drains through land owned by Radio New Zealand and Whitireia Park, and Titahi Bay golf course. Parts of the wetland have moderate quality wetland vegetation, while other areas contain a higher proportion of exotic species, but this is likely to become more representative with time (following the removal of stock and pest plant control). The SNA meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: <i>Carex secta</i> sedgelands are representative of original wetland ecosystems, which are no longer commonplace and are poorly represented in the Wellington region. [Note: <i>Carex secta</i> should be <i>Carex geminata</i>, as determined during the site survey].</p> <p>Criterion RPS23B – Rarity: Supports an At Risk plant species (<i>Ranunculus macropus</i>). Wetlands are nationally rare (<10% of their original extent remains) and a regionally uncommon habitat type.</p>	<p>Action: The SNA has been amended to include four additional areas that meet the definition of 'natural wetland'. A small area of representative pōhuehue-kokihi vineland has also been included given it is hydrologically linked to the wetland.</p> <p>I recommend this submission point be accepted in part.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA139				12 July 2021	<p>This SNA comprises broad vegetation and habitat types such as rockland, rushland, herbfield, and gravelfield on coastal escarpments, dunelands and rocky shore ecosystems.</p> <p>The vegetation surveyed, and which is recommended for inclusion in the SNA, is contiguous with SNA and comprises a small area of low-stature <i>Coprosma propinqua</i> shrubland with occasional tauhinu and localised meadow rice grass.</p>	<p>SNA139 is the largest SNA at Whitireia Park which meets all five RPS criteria for significance.</p> <p>The vegetation surveyed is considered to meet Criterion RPS23A – Representativeness (representative of coastal <i>Coprosma propinqua</i> shrubland, a vegetation type that is uncommon in the Porirua District, i.e., less than 30% remaining)</p>	<p>Action: Based on the survey undertaken by Wildlands, the SNA boundary has been amended to include the contiguous area of <i>Coprosma propinqua</i> shrubland.</p> <p>The submitter has noted that the site summary for SNA139 does not acknowledge that the site supports two communities of pygmy button daisy (<i>Leptinella nana</i>), which has a threat classification of 'Threatened – Nationally Critical' as per de Lange et al. (2018). The submitter also notes that the summary wrongly includes active sand dune system.</p> <p>Action: The relevant part of the site summary has been amended to:</p> <p><i>Other rare ecosystems include coastal turf (Nationally Critical), active sand dunes (Nationally Endangered), and shingle beaches (Nationally Endangered). This site contains one Threatened and seven At Risk plant species including: pygmy button daisy (<i>Leptinella nana</i>; Threatened-Nationally Critical; <u>two known populations</u>)</i></p> <p>I recommend this submission point be accepted.</p>
SNA144	Stuart Park Wetland	Unknown	Robyn Smith	N/A – desktop survey	<p>The submitter describes the area as a wetland dominated by rautahi (<i>Carex geminata</i>) with a locally common patch of <i>Juncus caespiticus</i>, which has a threat ranking of 'At Risk – Declining' as per de Lange et al. (2018). This area has not been included in SNA144.</p> <p>A site visit has not been undertaken; however, inspection of aerial photography indicates that the wetland is highly likely to comprise indigenous sedgeland.</p>	<p>General comments: The SNA comprises a broad range of representative habitats including coastal escarpment, shrubland, rockland, gravelfield, and a small freshwater wetland.</p>	<p>Action: The SNA boundary has been amended to include the wetland.</p> <p>I recommend this submission point be accepted.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA155	522 Paremata Haywards Road, Judgeford	Lot 6 DP 429671	Chris Foothead	N/A – desktop survey undertaken	<p>Inspection of aerial photography indicates that the vegetation comprises the following vegetation types:</p> <ol style="list-style-type: none"> 1. Kānuka-mānuka scrub. 2. Ponga-mamaku treefernland <p>Mature wilding pines are scattered throughout the property.</p>	<p>General comments: The property falls within the eastern remnant of SNA155 and comprises regenerating indigenous scrub and treefernland on rolling hillslopes and in gullies. The part of SNA155 that occurs on the subject property meets the following significance criteria:</p> <p>Criterion RPS23A – Representativeness: Contains elements of kānuka-mānuka forest and scrub, which are representative of current vegetation types are rare and poorly protected in Porirua City.</p> <p>Criterion RPS23D – Ecological context: Enhances connectivity and offers riparian protection in the mid Pauatahanui catchment.</p>	<p>There is no justification for amending or removing the SNA boundary.</p> <p>I recommend this submission point be rejected.</p>
SNA160	266 Murphys Road, Judgeford	Lot 2 DP 326694	Magdalena Conradie	13 July 2021	<p>Kānuka-mānuka forest and scrub with frequent mahoe and occasional kowhai and hinau in the canopy, and occasional emergent black wattle and eucalyptus. Sub-canopy, understory and ground tier include <i>Coprosma propinqua</i>, mapou, kaikomako, hangehange, tauhinu, kohia (native passionfruit), and the ferns kiwikipi, climbing hard fern, and gully fern.</p>	<p>General comments: The vegetation at the property is currently grazed and is contiguous with a larger (fenced) area of tawa forest that meets Criterion RPS23A – Representativeness (no longer commonplace and are under-protected in the Wellington region).</p> <p>Although not stated in the original significance assessment, the area of kānuka-mānuka forest and scrub on the property is considered to be representative of current vegetation types, which are rare and poorly protected in the Porirua District (less than 20% protected). This area also provides important buffering to the tawa forest.</p>	<p>Action: The SNA boundary has been revised to exclude a large pine tree, a gum tree, and a small clearing.</p> <p>I recommend this submission point be accepted in part.</p>

SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA165	129B Flightys Road, Judgeford, RD1	Lot 12 DP 86453	Steven Kovacs	30 July 2021	<p>1. Māhoe forest and scrub</p> <p>2. <i>Carex geminata</i> sedgeland</p> <p><i>Isolepis prolifer-Juncus sarophorus</i> sedgeland</p>	<p>General comments: The vegetation at the property comprises a minor component of the SNA, with the largest remnant located a few hundred metres to the south. The vegetation comprises a good quality freshwater wetland partially buffered by mahoe forest and scrub. It is likely that construction of the pond in the centre of the site resulted in the formation of upstream wetland vegetation; however, induced wetlands are still considered to be 'natural' under the definition of natural wetland under the National Policy Statement for Freshwater Management (NPS-FM).</p> <p>The original SNA assessment states that the SNA contains a representative example of kānuka forest, which is rare and poorly protected in the Porirua District, and therefore meets Criterion RPS23A – Representativeness. However, there is no kānuka forest at the subject property – only māhoe forest, which is not an uncommon vegetation type in the Porirua District.</p> <p>The original SNA assessment also states that the SNA meets Criterion RPS23D – Ecological context as the "site plays a significant connectivity role in the fragmented lowland zone and includes an area protected by the PCC covenant". I consider the small size of the site would preclude it from meeting this particular criterion.</p> <p>The site, however, contains indigenous wetland habitat, and it therefore meets the Criterion RPS23B – Rarity, given that wetlands are nationally rare (<10% of their original extent remains) and have been much reduced in extent in the Wellington region.</p>	<p>Action: The SNA boundary has been amended to exclude most of the māhoe forest and scrub, and instead capture all wetland vegetation.</p> <p>I recommend this submission point be accepted in part.</p>
SNA216	1122H Paekakariki Hill Road	Lot 2 DP 303805	Mike (William Michael) Arnold	N/A – desktop survey	<p>The site comprises the smaller of two remnants that make up SNA216. Northern and western parts of the site comprise young plantation forest and include species such as pūriri, rewarewa, Tasmanian blackwood, tōtara, and mātai. Indigenous vegetation to the south of the track comprises mature māhoe forest with frequent to occasional tawa, kohekohe, māhoe, pukatea, kaikōmako, nīkau, pigeonwood, mamaku, putaputawētā, ponga, kānuka and lancewood.</p>	<p>General comments: The SNA meets the criteria for representativeness, diversity, and ecological context, although these are likely to be more applicable to the much larger, more intact southern remnant.</p>	<p>Action: The SNA boundary has been amended based on inspection of aerial photography together with the site map and photographs provided by the submitter. Areas of planted exotic and indigenous forestry have been excluded from the SNA, together with a track to service a gas supply pipe. Naturally occurring indigenous forest has been retained.</p> <p>I recommend this submission point be accepted.</p>

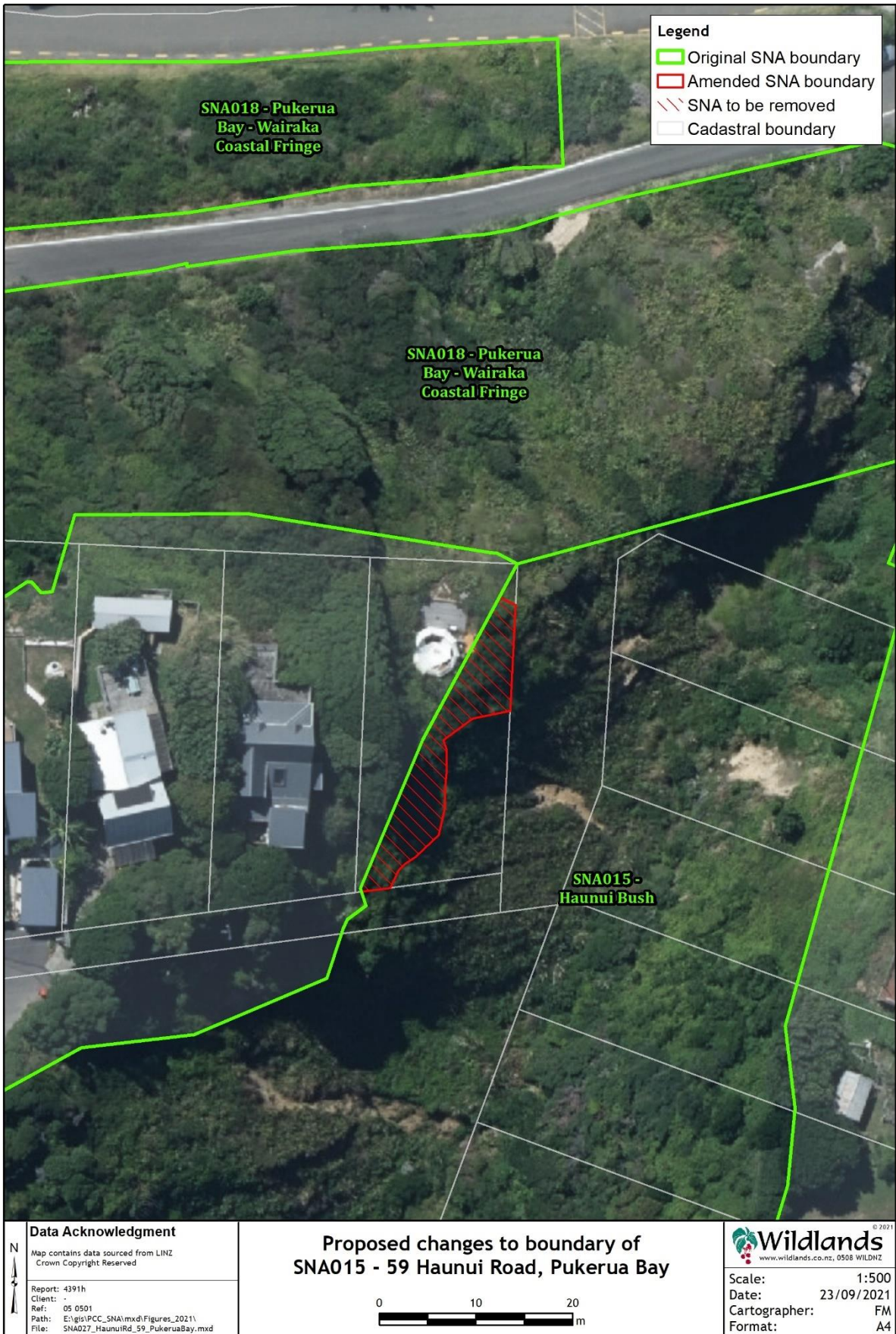
SNA No.	Street address	Property ID	Submitter(s)	Field Inspection Date	Vegetation Types Surveyed at Property	Significance Assessments	Ecologists' Actions and Recommendations
SNA223	Whitireia Park and Peninsula	Sec 4 SO 446704, Pt Lot 1 DP 10900, Sec 40 Blk VIII Paekakari ki SD	Titahi Bay Community Group and Pest Free Titahi Bay (Joel de Boer and Abbe Holmes), Luke Davia, Robyn Smith	12 July	<p>The submitters have requested a description of this SNA since it has been omitted from Schedule 7.</p> <p>The wetland vegetation comprises a mosaic of common Yorkshire fog and <i>Isolepis prolifer</i> with frequent <i>Juncus</i> spp. and giant umbrella sedge, and occasional creeping buttercup. <i>Carex geminata</i> and spike sedge (<i>Eleocharis acuta</i>) are also likely to be present.</p>	<p>General comments: The SNA was inspected during the visit to Whitireia Park and can be described as an induced wetland on a very narrow gully floor buffered by regenerating indigenous shrubland and rank grass on steep hills. Common to frequent terrestrial species include <i>Coprosma propinqua</i>, tauhinu and pōhuehue (<i>Muehlenbeckia complexa</i>).</p> <p>The site comprises wetland habitat that is dominated by indigenous species, and it therefore meets the Criterion RPS23B – Rarity (wetlands are nationally rare (<10% of their original extent remains) and have been much reduced in extent in the Wellington region). The site also includes indigenous vegetation on an Acutely Threatened land environment (less than 10% indigenous vegetation remaining).</p> <p><u>Note:</u> the submitter states that a regionally significant species is present in the wetland (page 9 of the Submission on City-Wide Plan Review prepared by Robyn Smith), although this species has not been named.</p>	<p>Action: Site summary updated to include vegetation description and significance criteria met. This will be reflected in Schedule 7 as per below.</p> <p>Site summary: A small area of wetland, which is a rare ecosystem type in the wellington region. This site includes indigenous vegetation on an Acutely Threatened land environment and a regionally uncommon species. The wetland vegetation comprises a mosaic of common Yorkshire fog and <i>Isolepis prolifer</i> with frequent <i>Juncus</i> spp. and giant umbrella sedge, and occasional creeping buttercup. <i>Carex geminata</i> and spike sedge (<i>Eleocharis acuta</i>) are also likely to be present.</p> <p>Criterion RPS23B – Rarity (wetlands are nationally rare (<10% of their original extent remains) and have been much reduced in extent in the Wellington region). The site also includes indigenous vegetation on an Acutely Threatened land environment (less than 10% indigenous vegetation remaining).</p> <p>I recommend this submission point be accepted.</p>

APPENDIX 2

Maps illustrating boundary adjustments made as a result of submitter-requested site visits or desktop analysis undertaken in 2021

List of figures by SNA number and submitter name

1. SNA004 - Pamela Meekings-Stewart
2. SNA015 - Gabriel Davidson
3. SNA027 - Grant Abdee
4. SNA032 - Ian and Helen Gear
5. SNA032 - Kathleen Ashton
6. SNA038 - Mark Palmer
7. SNA042 - Steve Grant
8. SNA047 - Kristian Coppietiers
9. SNA047 - Paul Botha
10. SNA058 - David Thomson
11. SNA065 - Hannah Gray
12. SNA068 - Christine Stanley and Alan Gray
13. SNA069 - Christine Stanley and Alan Gray, Hannah Gray
14. SNA076 - Frances McNamara
15. SNA084 - David and Sheryn Harpham (Progeni Ltd)
16. SNA086 - Joanna Alderdice
17. SNA100 - Juan Qu
18. SNA102 - Graeme Walker (Samantha Montgomery Ltd)
19. SNA103 - Sarah Saunders
20. SNA104 - Anthony Brandon
21. SNA128 - Remi Leblanc
22. SNA134 - Titahi Bay Community Group and Pest Free Titahi Bay, Luke Davia, Robyn Smith
23. SNA135 - Titahi Bay Community Group and Pest Free Titahi Bay, Luke Davia, Robyn Smith
24. SNA136 - Titahi Bay Community Group and Pest Free Titahi Bay, Luke Davia, Robyn Smith
25. SNA137 - Titahi Bay Community Group and Pest Free Titahi Bay, Luke Davia, Robyn Smith
26. SNA138 - Titahi Bay Community Group and Pest Free Titahi Bay, Luke Davia, Robyn Smith
27. SNA139 - Robyn Smith
28. SNA144 - Robyn Smith
29. SNA160 - Magdalena Conradie
30. SNA165 - Steven Kovacs
31. SNA216 - Mike (William Michael) Arnold





Legend

- Original SNA boundary
- Amended SNA boundary
- - - SNA to be removed
- Cadastral boundary

SNA004 - Pukerua
Bay Kohekohe
Bush B & C

SNA004 - Pukerua
Bay Kohekohe
Bush B & C

Data Acknowledgment
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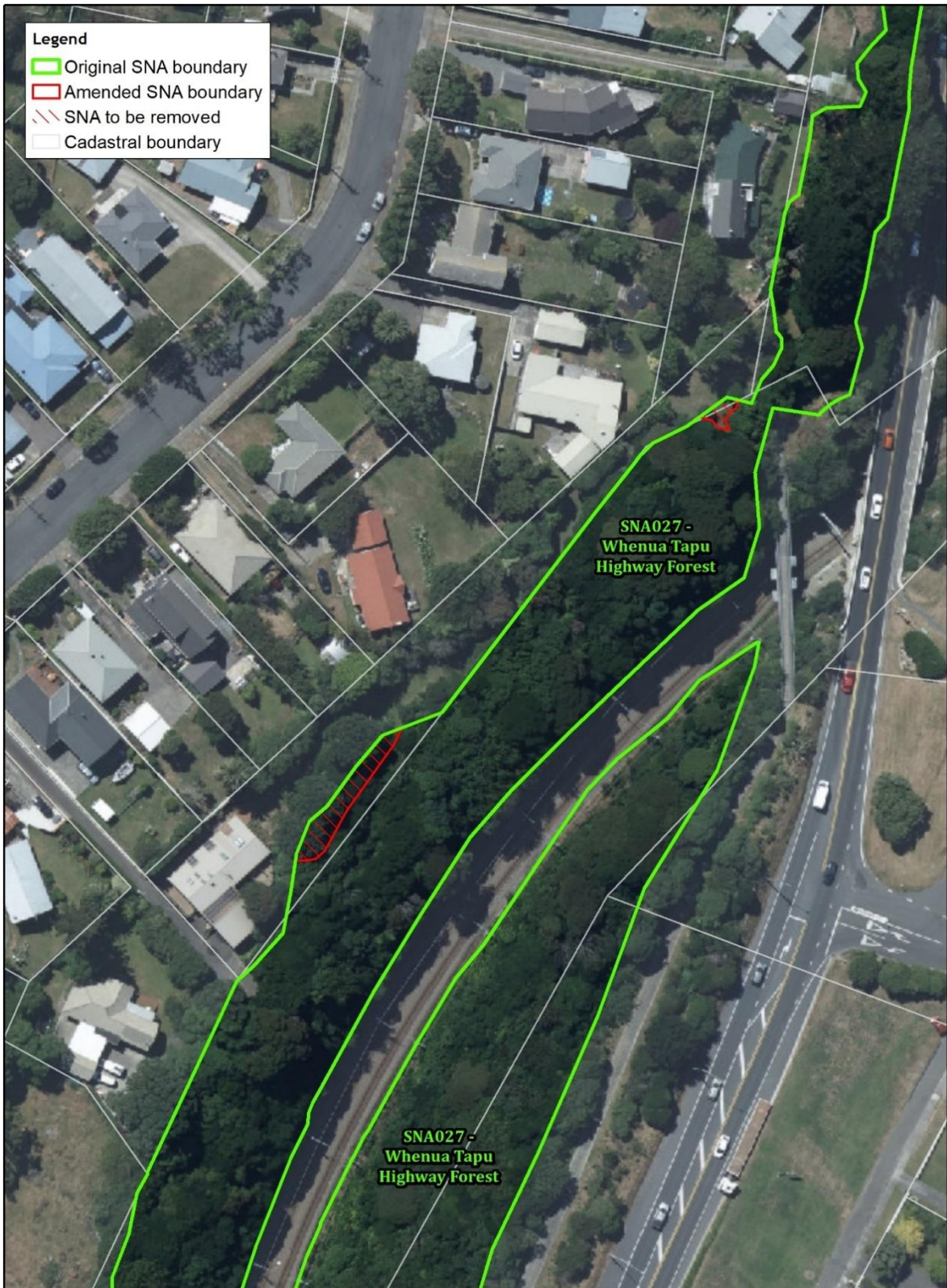
Report: 4391h
Client: -
Ref: 05 0501
Path: F:\GIS\PCG_SNA\map\Figures 2021s
File: SNA004_AurRD_144_PukeruaBay.mxd

Proposed changes to boundary of SNA004 - 144 Muri Road, Pukerua Bay



Wildlands
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Scale: 1:1,000
Date: 17/09/2021
Cartographer: FM
Format: A3R



Data Acknowledgment
 Map contains data sourced from LINZ
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Report: 4391h
 Client: -
 Ref: 05 0501
 Path: E:\gis\PC_C_SNA\mxd\Figures_2021\
 File: SNA027_RawhitiRd_153b.mxd

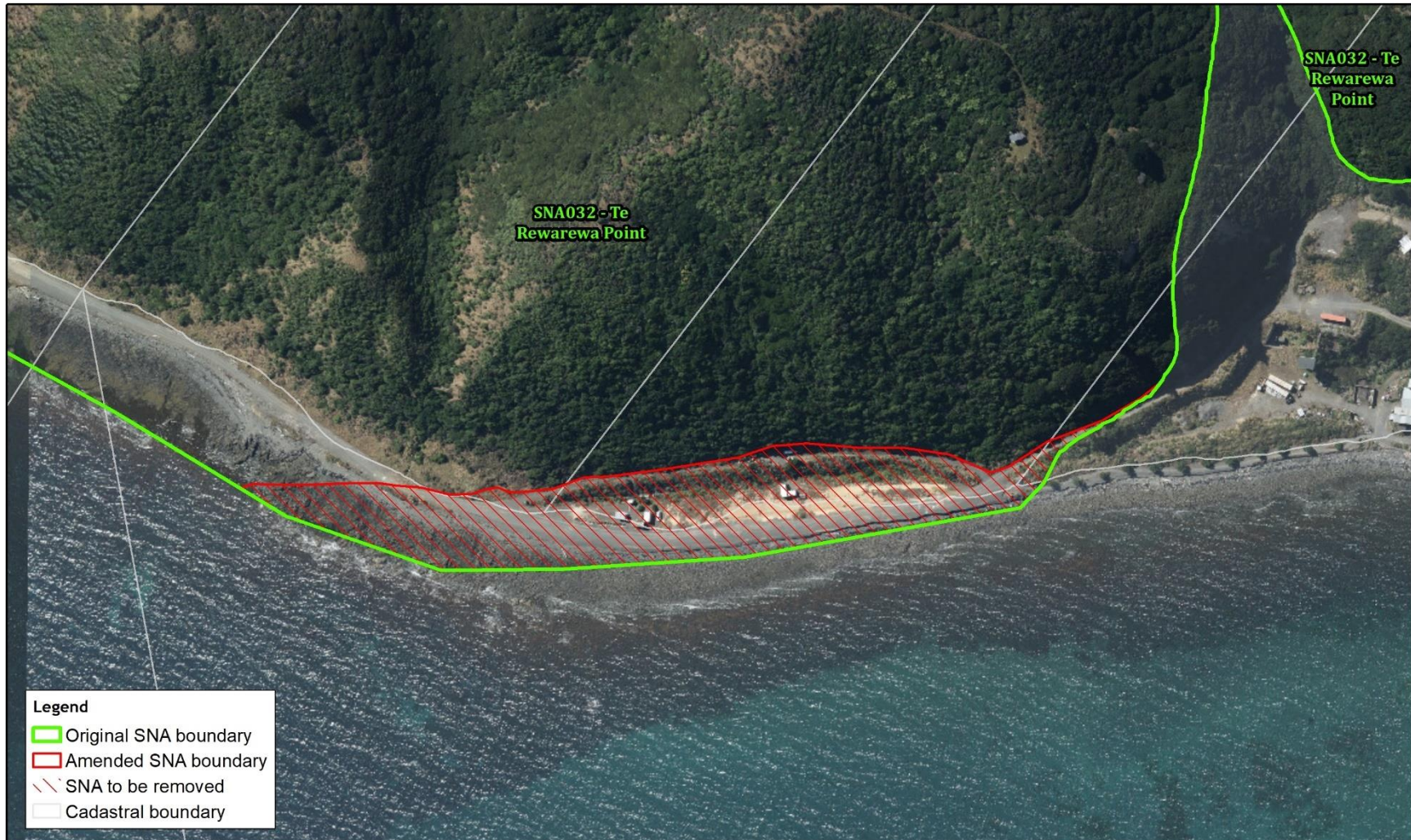
**Proposed changes to boundary of
 SNA027 - 153b Rawhiti Road**

0 25 50
 m

Wildlands
 www.wildlands.co.nz, 0508 WILDNZ

Scale: 1:1,000
 Date: 22/09/2021
 Cartographer: FM
 Format: A4





Legend

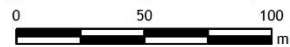
- Original SNA boundary
- Amended SNA boundary
- SNA to be removed
- Cadastral boundary

Data Acknowledgment

Map contains data sourced from LINZ
Crown Copyright Reserved

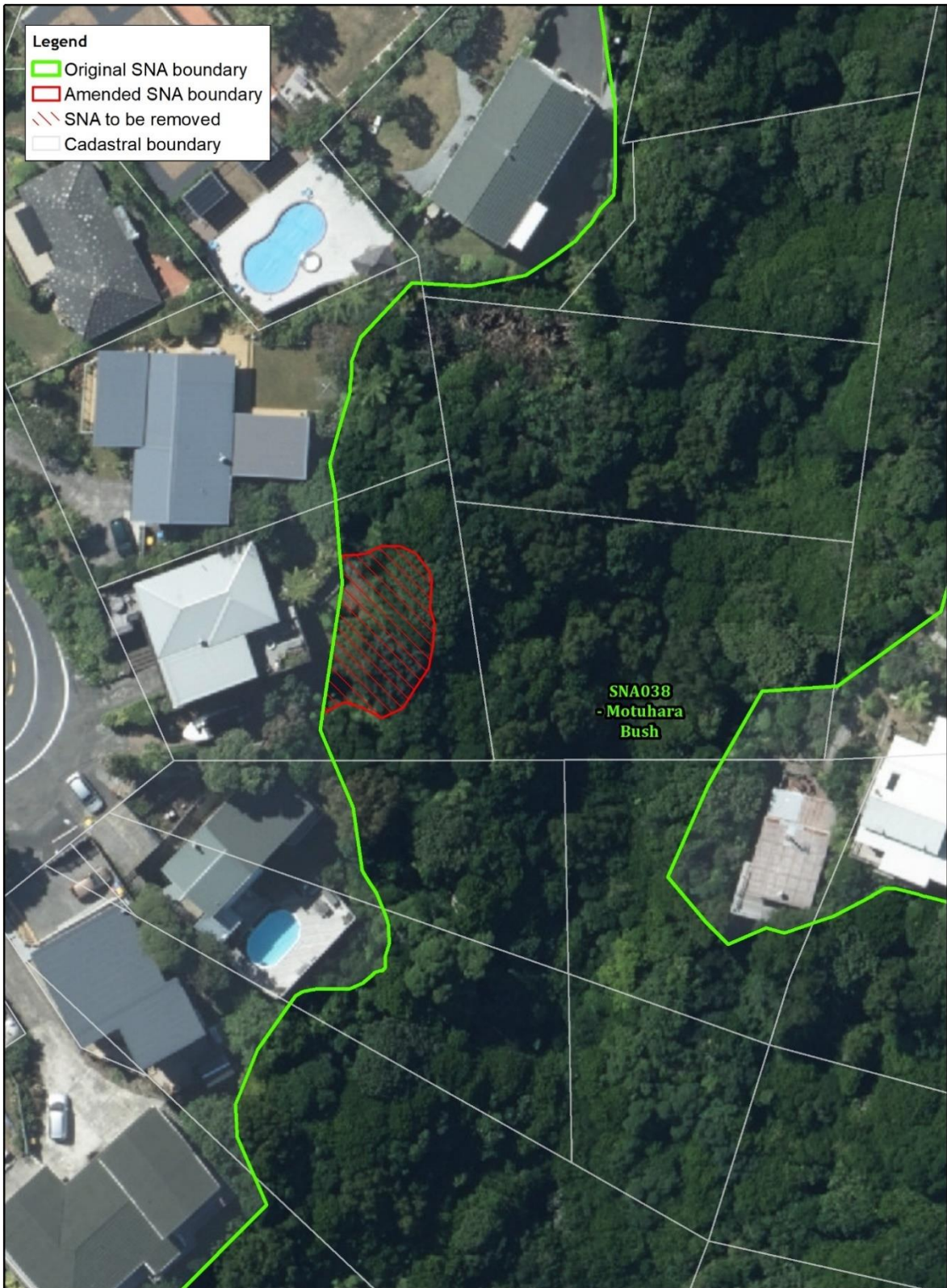
Report: 4391h
Client: -
Ref: 05 0501
Path: E:\gis\PC_C_SNA\mxd\Figures_2021\
File: SNA032_HongoekaBayRd_HongoekaZone.mxd

Proposed changes to boundary of SNA032 - Hongoeka Bay Road (Hongoeka Zone)



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Scale: 1:2,500
Date: 22/09/2021
Cartographer: FM
Format: A4R



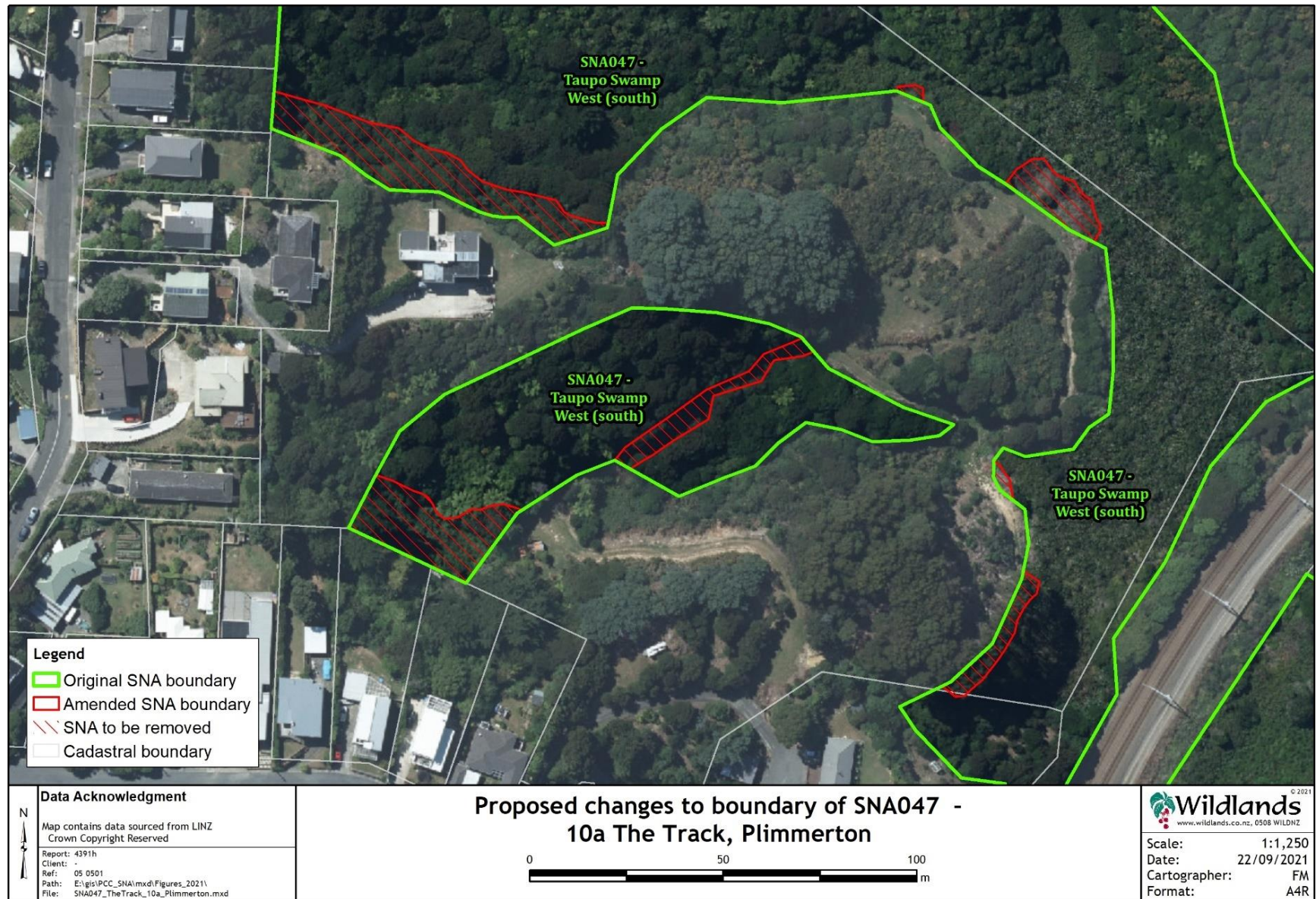
	Data Acknowledgment
	Map contains data sourced from LINZ Crown Copyright Reserved
	Report: 4391h
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	Ref: 05 0501
Path: E:\gis\pcc_sna\mxd\Figures_2021\	
File: SNA038_MotuharaRd_83_Plimmerton.mxd	

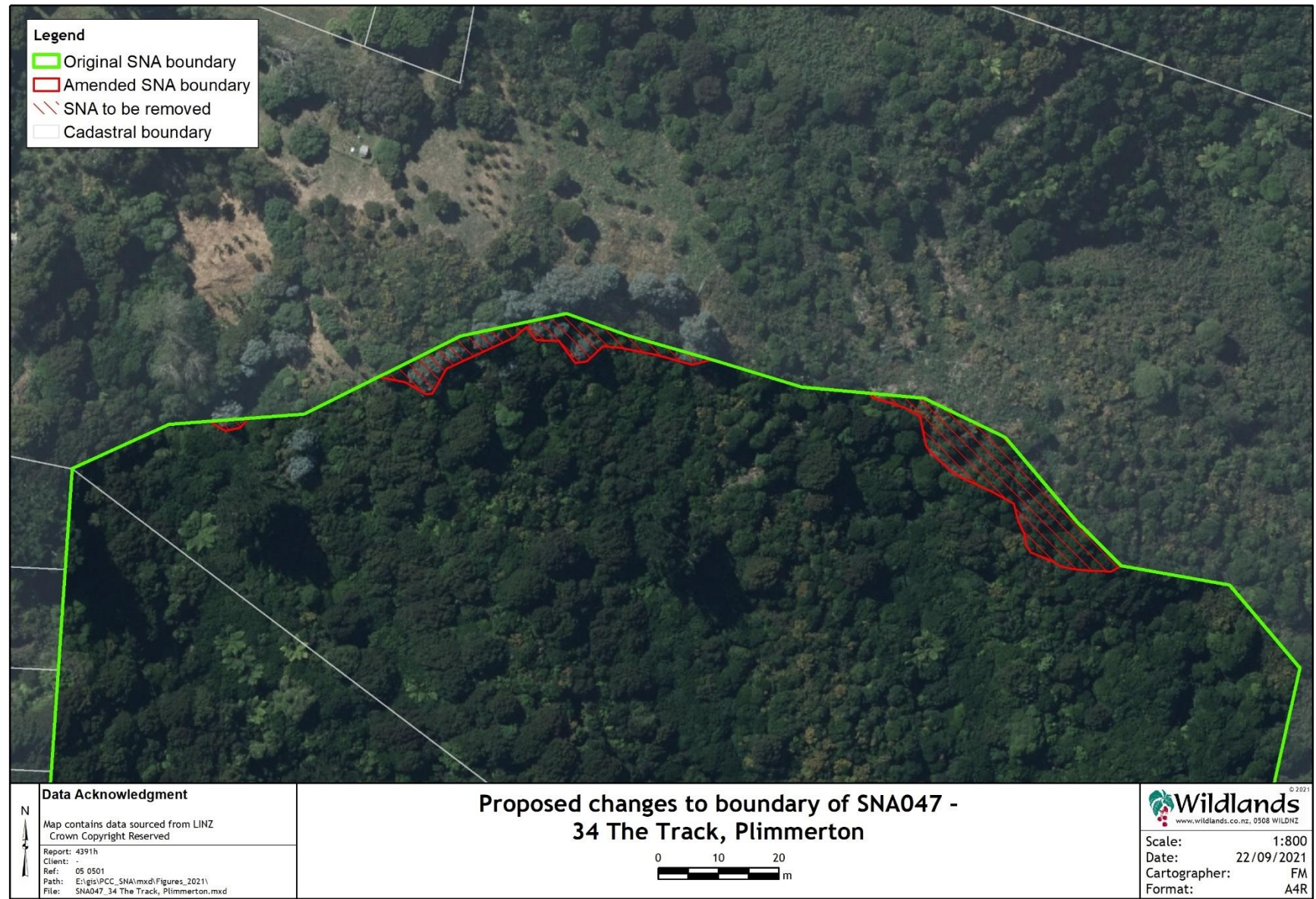
**Proposed changes to boundary of
SNA038 - 83 Motuhara Road,
Plimmerton**

0 10 20 m

	© 2021
	www.wildlands.co.nz, 0508 WILDNZ
Scale:	1:500
Date:	22/09/2021
Cartographer:	FM
Format:	A4









Legend

- Original SNA boundary
- Amended SNA boundary
- SNA to be removed
- Cadastral boundary

Data Acknowledgment

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Report: 4391h
Client: -
Ref: 05 0501
Path: E:\gis\PC_C_SNA\mxd\Figures_2021\
File: SNA058_PendeenPL_3_Camborne.mxd

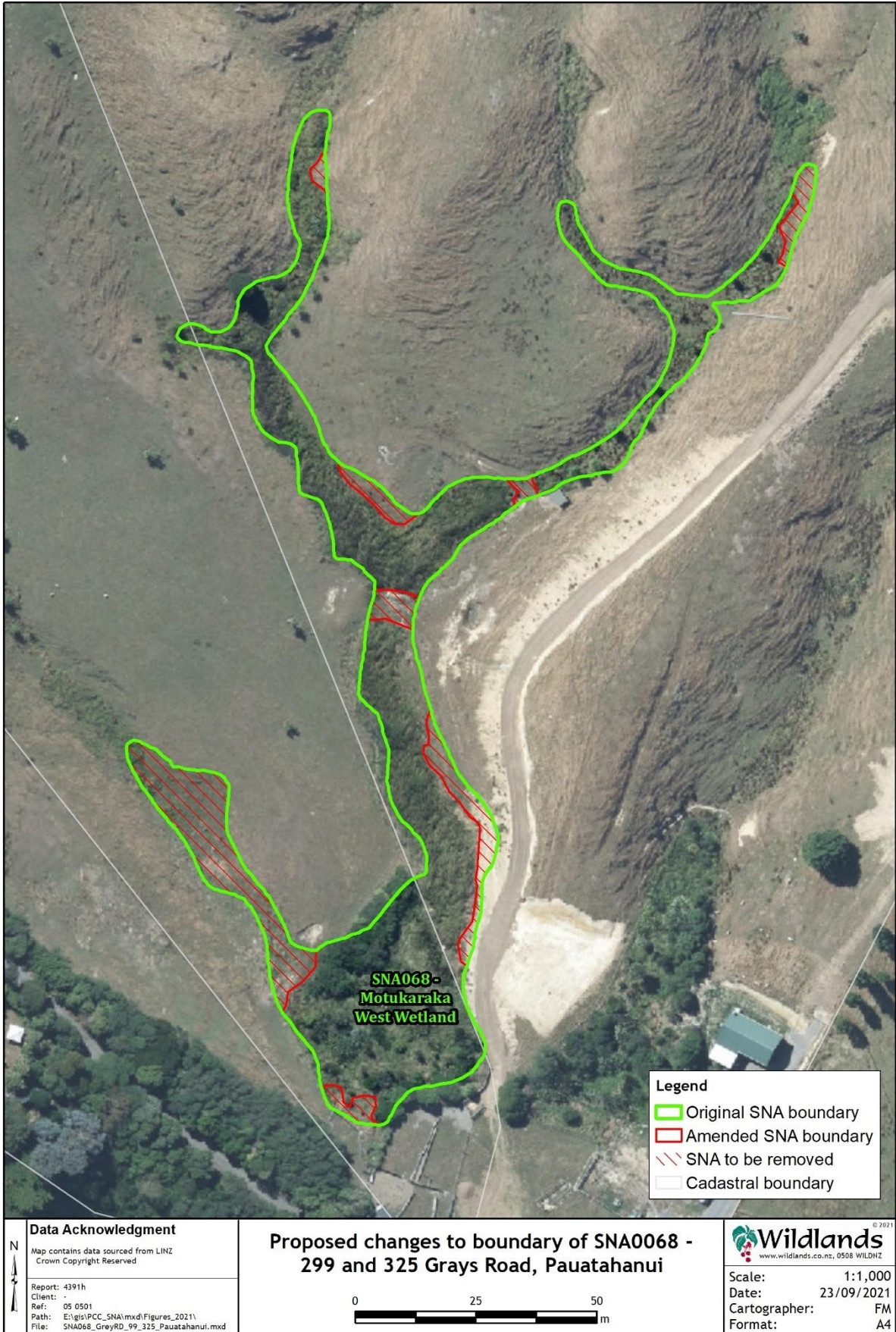
**Proposed changes to boundary of
SNA058 - 3 Pendeen Place,
Camborne**

0 10 20
 m

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Scale: 1:350
Date: 22/09/2021
Cartographer: FM
Format: A4







**SNA076 -
Eastern Whitby
Kānuka Forest**

	Data Acknowledgment
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	Report: 4391h
	Client: -
	Ref: 05 0501
Path: E:\gis\PC_C_SNA\mxd\Figures_2021\	
File: SNA076_LodestarPL_6_Whitby.mxd	

**Proposed changes to boundary of
SNA076 - 6 Lodestar Place,
Whitby**

0 10 20
m

	Scale: 1:500
	Date: 22/09/2021
	Cartographer: FM
	Format: A4
	© 2021



Legend

- Original SNA boundary
- Amended SNA boundary
- SNA to be removed
- Cadastral boundary

Data Acknowledgment

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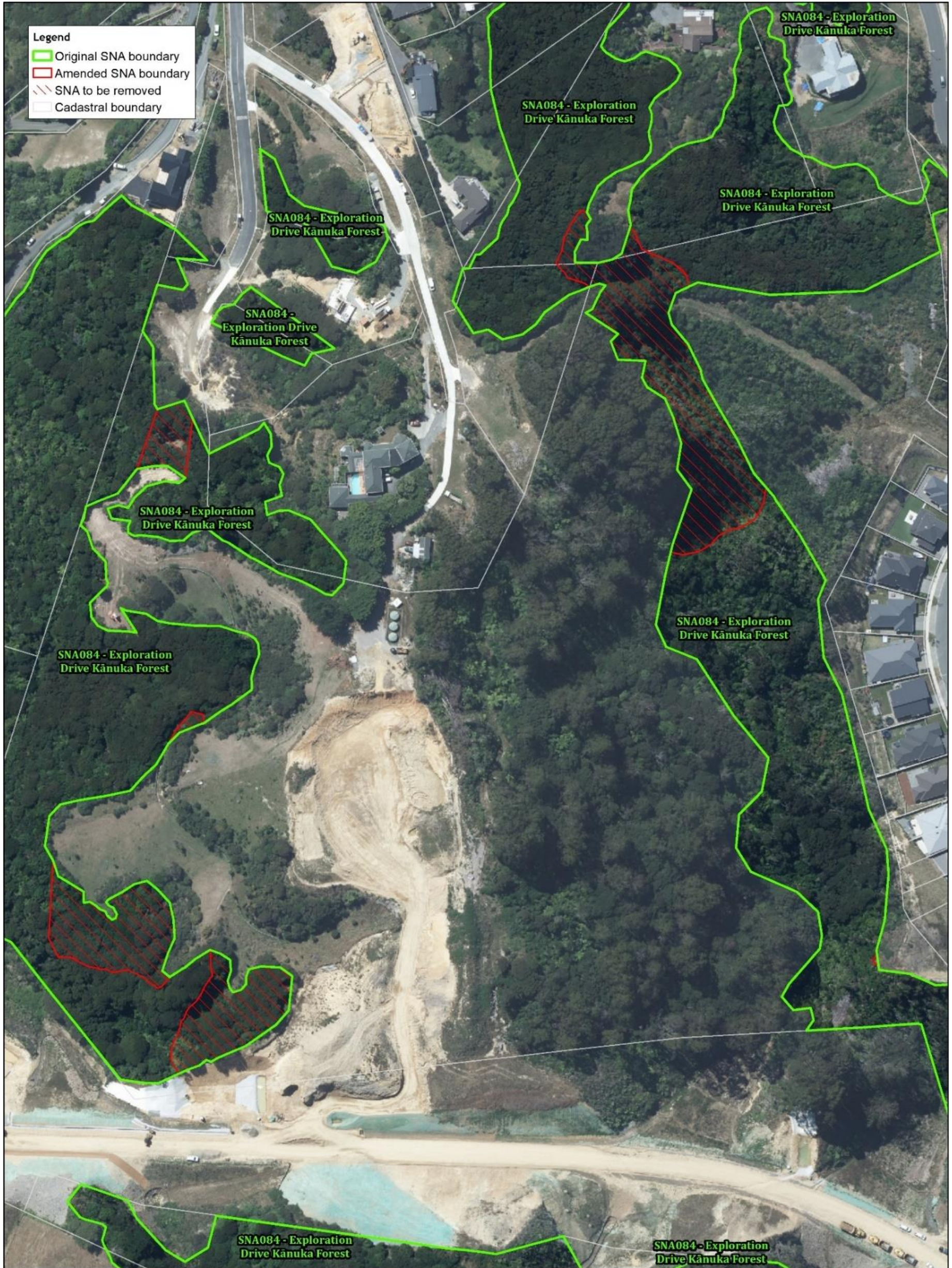
Report: 4391h
Client: -
Ref: 05 0501
Path: E:\gis\PCC_SNA\mxd\Figures_2021\
File: SNA069_GraysRd_299_325_Pauatahanui.mxd

**Proposed changes to boundary of SNA069 -
299 and 325 Grays Road, Pauatahanui**

0 50 100
m

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Scale: 1:1,500
Date: 22/09/2021
Cartographer: FM
Format: A4R



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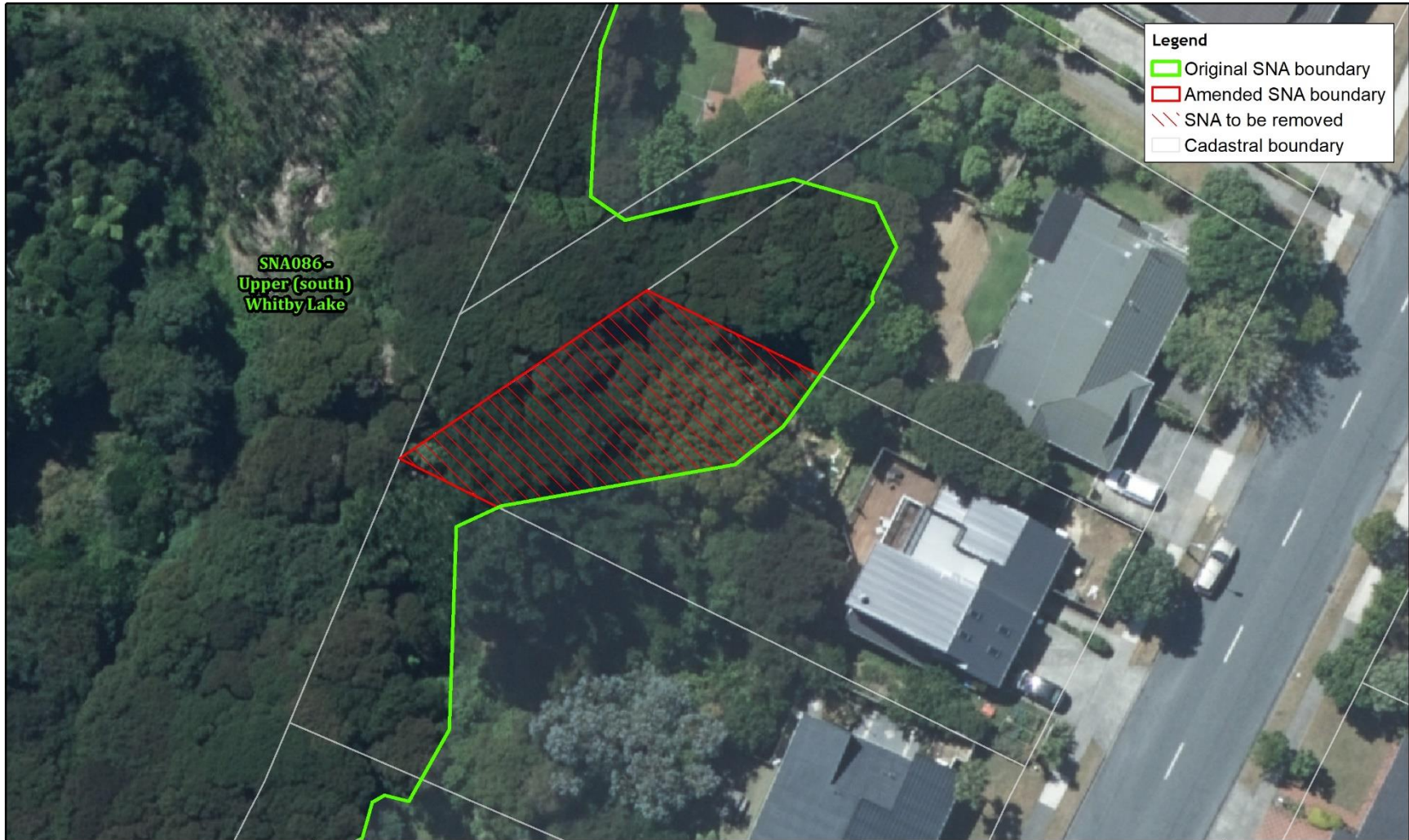
Report: 4391h
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 Ref: 05 0501
 Path: E:\gis\PCC_SNA\mxd\Figures_2021\1
 File: SNA084_ExplorationWay_68_Whitby.mxd

**Proposed changes to boundary of SNA084 -
 68 Exploration Way, Whitby**

0 50 100
 m

Wildlands
 www.wildlands.co.nz, 0508 911212

Scale: 1:1,500
 Date: 17/09/2021
 Cartographer: FM
 Format: A3



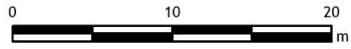
Legend

- █ Original SNA boundary
- ▨ Amended SNA boundary
- SNA to be removed
- Cadastral boundary

**SNA086 -
Upper (south)
Whitby Lake**

	Data Acknowledgment
	Map contains data sourced from LINZ Crown Copyright Reserved
	Report: 4391h
	Client: -
	Ref: 05 0501
Path: E:\gis\PC_C_SNA\mxd\Figures_2021\	
File: SNA086_ExplorationWay24.mxd	

**Proposed changes to boundary of
SNA086 - 24 Exploration Way**



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Scale:	1:400
Date:	20/09/2021
Cartographer:	FM
Format:	A4R



- Legend**
- ▬ Original SNA boundary
 - ▬ Amended SNA boundary
 - ▨ SNA to be removed
 - ▬ Cadastral boundary

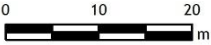
SNA100 - Omapere Street Reserve

Data Acknowledgment

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Report: 4391h
Client: -
Ref: 05 0501
Path: E:\gis\ACoMap\mxd\
File: SNA100_AbbeyWay_3_Whitby.mxd

Proposed changes to boundary of SNA100 - 3 Abbey Way, Whitby



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Scale: 1:700
Date: 22/09/2021
Cartographer: FM
Format: A4





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Report: 4391h
 Client: -
 Ref: 05 0501
 Path: E:\gis\PC_C_SNA\mxd\Figures_2021\
 File: SNA103_EskdaleRd_82_Papakowhai.mxd

**Proposed changes to boundary of
 SNA103 - 82 Eskdale Road, Papakowhai**

0 10 20
 m

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Scale: 1:1,000
 Date: 10/09/2021
 Cartographer: FM
 Format: A4



- Legend**
- ▬ Original SNA boundary
 - ▬ Amended SNA boundary
 - ▨ SNA to be removed
 - ▭ Cadastral boundary

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Report: 4391h
 Client: -
 Ref: 05 0501
 Path: E:\gis\PC_C_SNA\mxd\Figures_2021\
 File: SNA104_TweedStreet_44_Papakowhai.mxd

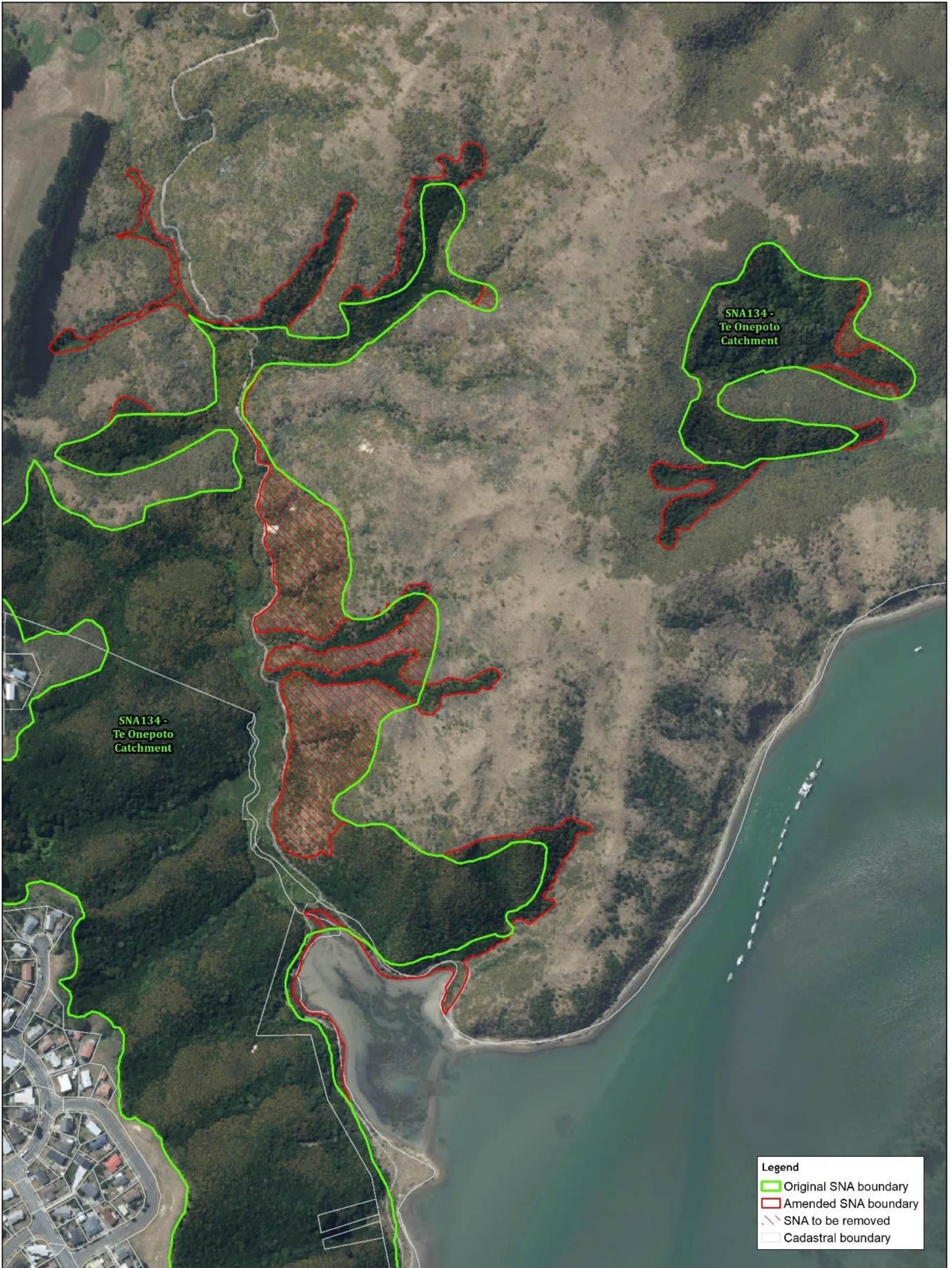
**Proposed changes to boundary of
 SNA104 - 44 Tweed Street,
 Papakowhai**

0 10 20
 m

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Scale: 1:400
 Date: 22/09/2021
 Cartographer: FM
 Format: A4





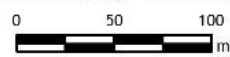
Legend

- ▭ Original SNA boundary
- ▭ Amended SNA boundary
- ▨ SNA to be removed
- ▭ Cadastral boundary

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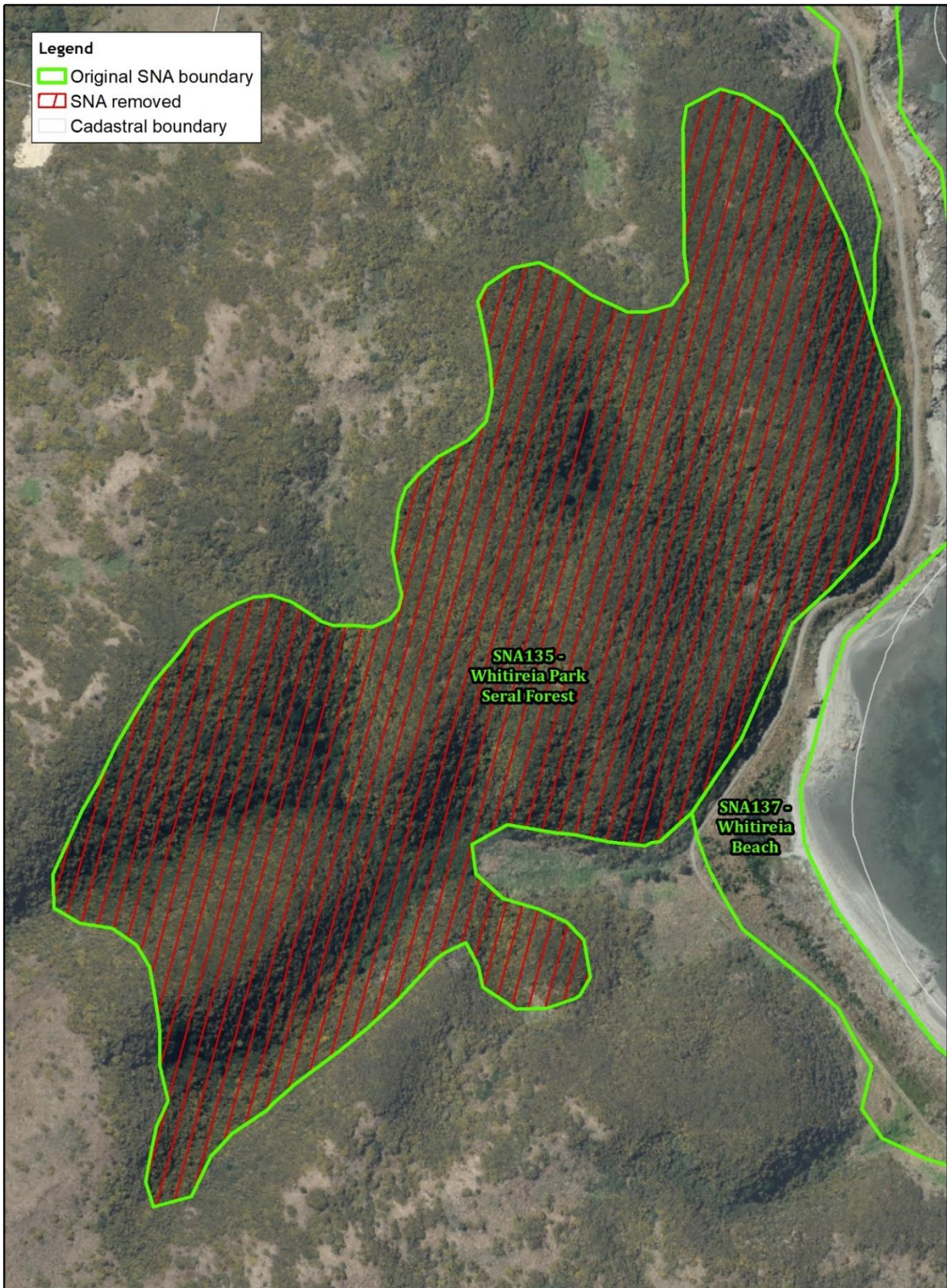
Report: 4391h
 Client:
 Ref: 05 0501
 Path: E:\gis\PC_C_SNA\mxd\Figures_2021\
 File: SNA134_Whitireia Park and Peninsula.mxd

**Proposed changes to boundary of
 SNA134 - Whitireia Park and Peninsula**



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Scale: 1:3,500
 Date: 22/09/2021
 Cartographer: FM
 Format: A3



Legend

- Original SNA boundary
- SNA removed
- Cadastral boundary

**SNA135 -
Whitireia Park
Seral Forest**

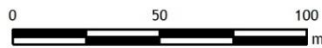
**SNA137 -
Whitireia
Beach**

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Report: 4391h
Client: -
Ref: 05 0501
Path: E:\gis\PC_C_SNA\mxd\Figures_2021\
File: SNA135_Whitireia Park and Peninsula.mxd

**Proposed changes to boundary of
SNA135 - Whitireia Park and Peninsula**



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Scale: 1:2,150
Date: 10/09/2021
Cartographer: FM
Format: A4



Legend

- ▬ Original SNA boundary
- ▬ Amended SNA boundary
- Cadastral boundary

Data Acknowledgment

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Report: 4391h
 Client: 05 0501
 Path: E:\gis\PCC_SNA\mxd\Figures_2021\
 File: SNA136_Whitireia Park and Peninsula.mxd

**Proposed changes to boundary of
 SNA136 - Whitireia Park and Peninsula**



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Scale: 1:2,100
 Date: 10/09/2021
 Cartographer: FM
 Format: A4R



	Data Acknowledgment
	Map contains data sourced from LINZ Crown Copyright Reserved
	Report: 4391h
	Client: -
	Ref: 05 0501
Path: E:\gis\PC_C_SNA\mxd\Figures_2021\	
File: SNA137_Whitireia Park_Peninsula.mxd	

**Proposed changes to boundary of SNA137 -
Whitireia Park and Peninsula**

0 25 50

 m

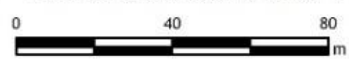
 <small>www.wildlands.co.nz, 0508 WILDNZ</small>	
Scale:	1:1,000
Date:	16/09/2021
Cartographer:	FM
Format:	A4



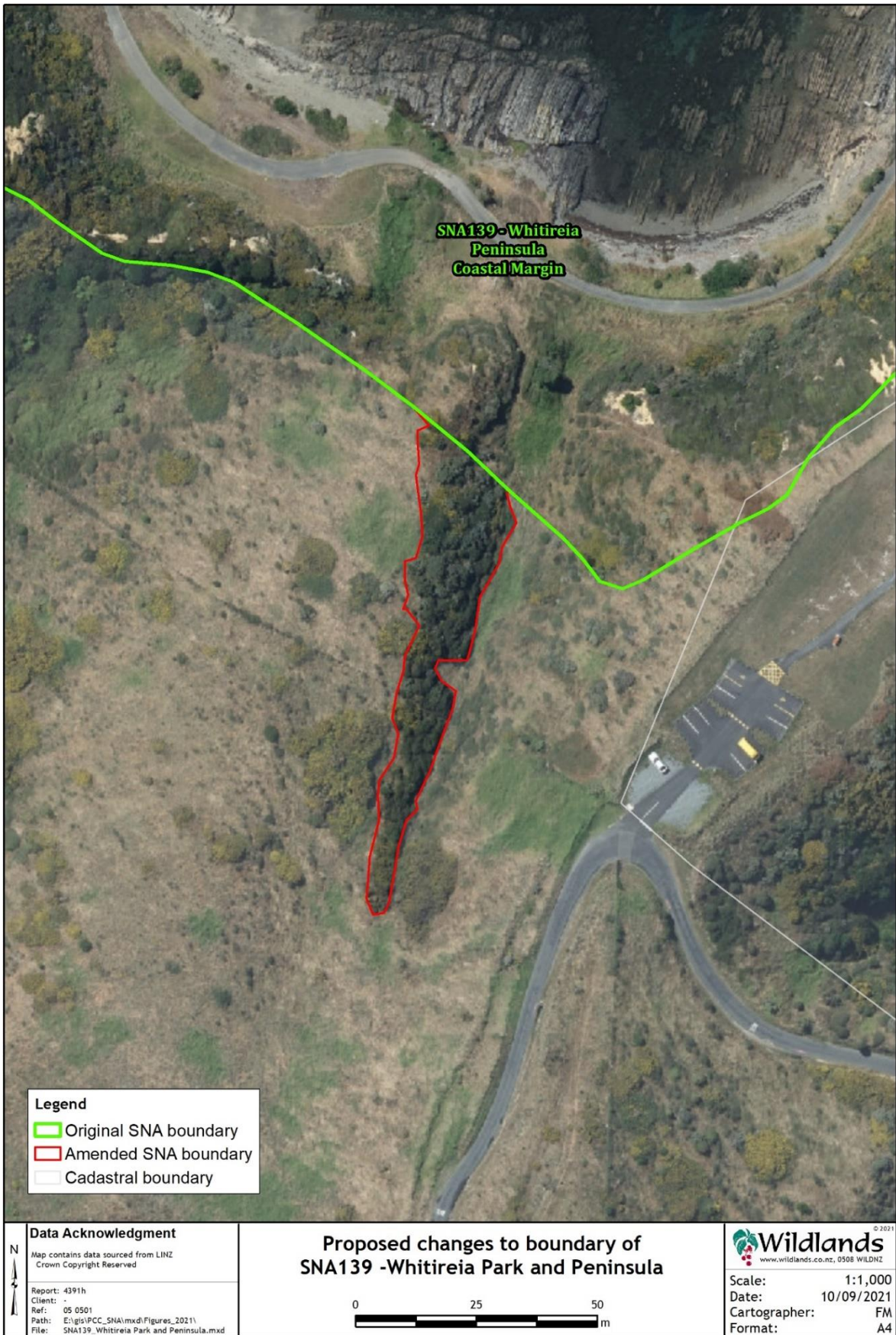
Legend
 [Green outline] Original SNA boundary
 [Red outline] Amended SNA boundary
 [White outline] Cadastral boundary

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 Report: 4391h
 Client: 05 0501
 Ref: E:\gis\PC_C_SNA\mxd\Figures_2021\
 Path: SNA138_Whitireia Park and Peninsula.mxd
 File: SNA138_Whitireia Park and Peninsula.mxd

**Proposed changes to boundary of
 SNA138 - Whitireia Park and Peninsula**



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 Scale: 1:1,750
 Date: 10/09/2021
 Cartographer: FM
 Format: A3





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Report: 4391h
 Client: -
 Ref: 05 0501
 Path: E:\gis\PC_C_SNA\mxd\Figures_2021\
 File: SNA144_StuartParkWetland_TitahiBay.mxd

Proposed changes to boundary of SNA144 - Stuart Park Wetland, Titahi Bay

0 15 30
 m

Wildlands
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Scale: 1:700
 Date: 10/09/2021
 Cartographer: FM
 Format: A4





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Report: 4391h
 Client: -
 Ref: 05 0501
 Path: E:\gis\PC_C_SNA\mxd\Figures_2021\
 File: SNA165_FlightysRd_129b_Judgeford.mxd

**Proposed changes to boundary of
 SNA165 - 129b Flightys Road,
 Judgeford**

0 10 20
 m

Wildlands
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Scale: 1:800
 Date: 16/09/2021
 Cartographer: FM
 Format: A4



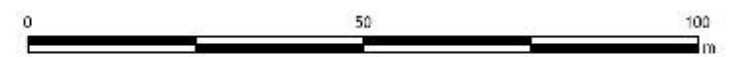
- Legend**
- ▭ Original SNA boundary
 - ▭ Amended SNA boundary
 - ▨ SNA to be removed
 - Cadastral boundary

SNA216 -
Pokorua
South Bush

Data Acknowledgment
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Report: 02913
Client: -
Ref: 06-0921
Path: F:\gis\BCC_14\Area\06_0921_2015
File: SNA216_Pakorua\06_0921_1122H.mxd

Proposed changes to boundary of SNA216 - 1122H Paekakariki Hill Road



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Scale: 1:1,000
Date: 16/09/2021
Cartographer: FM
Format: A3R

APPENDIX 3: FIGURES SHOWING PINE IN SNAs

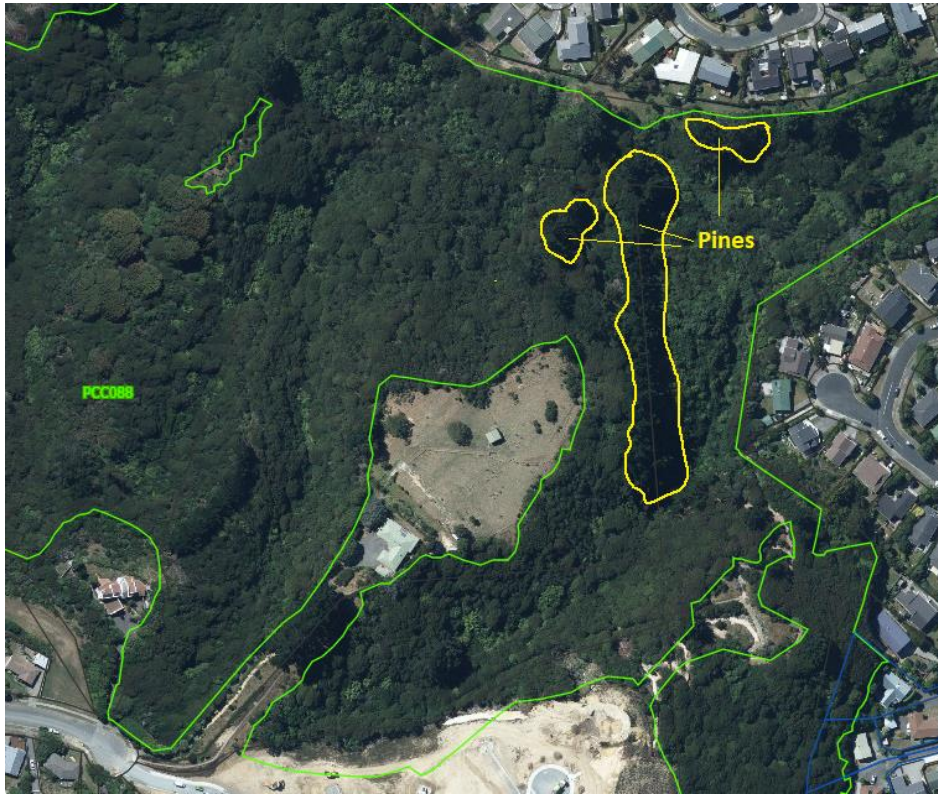


Figure 1: Three discrete areas of mature wilding conifers in SNA.

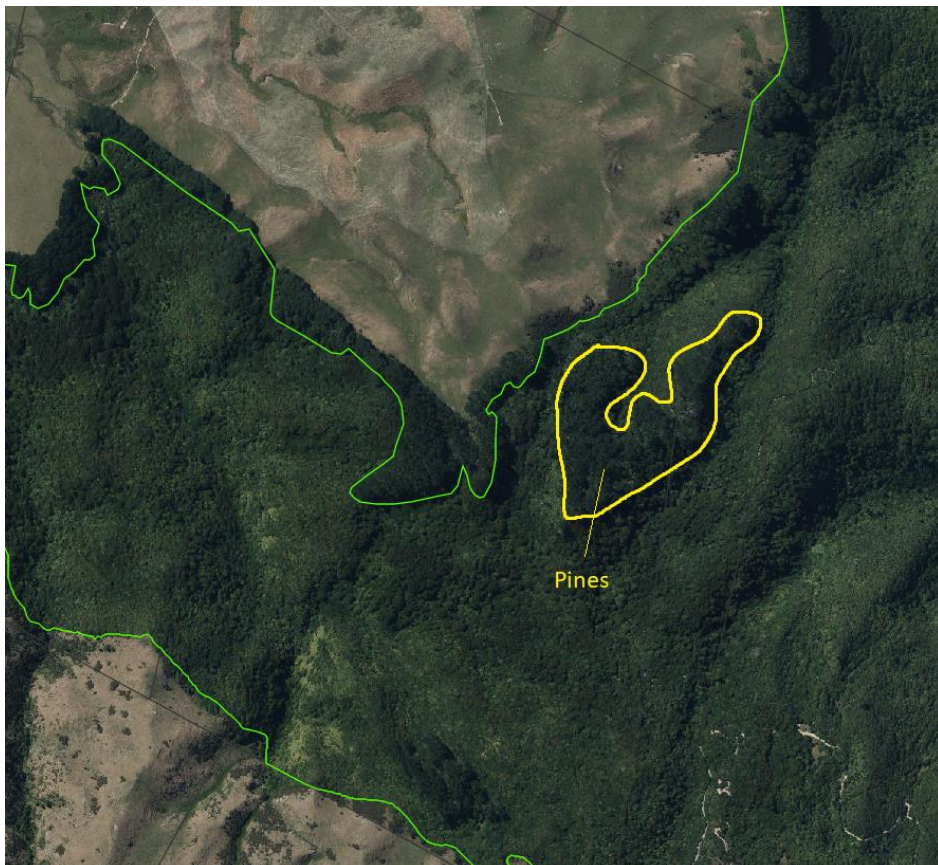


Figure 2: Large infestation of wilding conifers in SNA.

APPENDIX 4

Schedule of amendments to Schedule 8 'Urban Environment Allotments' of the PDP required as a result of submitter-requested site visits and desktop surveys conducted in July, August and September 2021.

Recommended insertions are underlined, and recommended deletions are denoted in ~~strike through~~ font.

Address	Legal description	Amended description
153b Rawhiti Road, Pukerua Bay	Lot 2 DP 51486	A group of no less than <u>10</u> 43 trees is located along the southeastern boundary of the property, along the top of ridge line, above the train tracks. The stand comprises the following indigenous and non-local indigenous species: five finger (<i>Pseudopanax arboreus</i>), māhoe (<i>Melicactus ramiflorus</i>), ngaio (<i>Myoporum laetum</i>), tarata (<i>Pittosporum eugenioides</i>), <u>kanuka (<i>Kunzea robusta</i>)</u> , <u>karaka (<i>Corynocarpus laevitagus</i>)</u> , and <u>kohekohe (<i>Dysoxylum spectabile</i>)</u> . tī kōuka (<i>Cordyline australis</i>), and pōhutukawa (<i>Metrosideros excelsa</i>) .
83 Motuhara Road, Plimmerton	Lot 7 DP 7028	A group of no less than <u>10</u> 20 trees is located in the eastern <u>quarter</u> third of the property. The stand comprises the following indigenous and non-local indigenous species: hīnau (<i>Elaeocarpus dentatus</i>), kohekohe (<i>Dysoxylum spectabile</i>), kōhūhū (<i>Pittosporum tenuifolium</i>), mamaku (<i>Cyathea medullaris</i>), rewarewa (<i>Knightia excelsa</i>), tītoki (<i>Alectryon excelsus</i>), and karaka (<i>Corynocarpus laevigatus</i>).
3 Abbey Way, Whitby	Lot 2 DP 460364	A group of no less than 20 trees is located in the eastern <u>eighth quarter</u> quarter of the property. The stand comprises the following indigenous species: kānuka (<i>Kunzea robusta</i>).