

UNDER

Resource Management Act 1991

IN THE MATTER

The Proposed Far North District Plan (PFNDP))

AND

IN THE MATTER

of submissions and further submissions by Pacific  
Eco-Logic Ltd. on that proposed District Plan

STATEMENT OF EVIDENCE OF VICTORIA ANN FROUDE

HEARING 4 – ECOSYSTEMS AND INDIGENOUS BIODIVERSITY AND THE COASTAL ENVIRONMENT

22 JULY 2024

## INTRODUCTION

1. My name is Victoria Ann Froude. I am presenting evidence for Pacific Eco-Logic Ltd. as a company director and ecologist specialising in terrestrial and marine environments. I have prepared ecological assessments for a variety of terrestrial and aquatic proposals throughout the North Island. I have been based on the Russell Peninsula since 2006, and I live on the margins of the Waikare Inlet. My qualifications include a BSc. (biological science), M.Sc. (resource management) and a PhD. (environmental science and policy). My PhD developed a quantitative methodology for measuring the Natural Character of New Zealand's coastal environments (<https://researchcommons.waikato.ac.nz/items/278e261c-33db-43dd-a8a8-26affa636c7e>). I have been a full member of the New Zealand Planning Institute, but I am not currently financial. I am a member of the New Zealand Ecological Society and the New Zealand Marine Sciences Society.
2. Other projects have included preparing the 125-page Indigenous biodiversity guidance note on the Ministry for the Environment's Quality Planning website, reviewing the ecology and management of wilding conifers in New Zealand, and mapping coastal natural character for the Regional Policy Statement for Northland.
3. I have considerable experience with ecological restoration, assessment, and monitoring in terrestrial, freshwater and marine environments.
4. I worked as a planner for the Ministry of Works and Development from 1986 to 1987 and the Department of Conservation from 1987 to 1996.
5. I have had a series of head injuries affecting visual processing, so I find it more difficult to spend much time writing on the computer. I have had a relatively recent bad experience with an abusive client who refused to pay for a comprehensive ecological assessment because I would not change the ecological report to say exactly what he wanted it to say. Clients like this are too stressful, so I have withdrawn from preparing terrestrial ecological assessments and management plans for those pursuing development in the Far North.
6. Technically, this is not independent expert evidence, as I signed the submission for Pacific Eco-Logic Ltd. However, I have used my expertise as an ecologist and a past planner to present expert information/assessments on several matters in the Pacific Eco-Logic submission and further submissions.
7. I have read the Code of Conduct for Expert Witnesses produced by the Environment Court (2014) and undertake to follow it for this hearing. My qualifications as an expert are set out above. Other than those matters identified within my evidence as being from other experts, I confirm that the issues addressed in this brief of evidence are within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.
8. Pacific Eco-Logic has not provided any financial assistance for preparing this evidence, and neither Pacific Eco-Logic nor I stand to benefit financially from it.
9. I volunteer considerable time to assist community groups with ecological restoration, including Russell Landcare Trust and Bay of Islands Maritime Park Inc. (Living Waters-Bay of Islands and Fish Forever).

## EVIDENCE OUTLINE

10. This evidence covers the following:

- a. Changes to address the exclusion of SNAs from the PFNDP
- b. Ecosystems and indigenous biodiversity rules, including environmental benefit subdivision
- c. Definitions
- d. Coastal environment (This includes evidence on Schedule 1 and Schedules 7 and 8 as I will be overseas when the relevant hearings for those topics are held)

#### CHANGES TO ADDRESS THE EXCLUSION OF “SIGNIFICANT NATURAL AREAS” IN THE PROPOSED FAR NORTH DISTRICT PLAN (PFNDP)

11. The S42A report recommendations include deleting references to SNA’s (replacing it with wording better related to s6(c) of the Resource Management Act), the deletion of IB-R3 and IB-R5; the deletion of the requirement for an ecological assessment, and refinement of indigenous vegetation clearance thresholds under IB-R4; additional definitions and the deletion of Schedule 4 (SNAs).
12. The deletion of the SNAs from the plan requires significant changes to this chapter to enable the plan to comply with the biodiversity protection requirements of the Resource Management Act, relevant National Policy Statements, and the Regional Policy Statement for Northland.
13. As part of preparing the Indigenous Biodiversity Guidance Note for the Quality Planning website (<https://www.qualityplanning.org.nz/node/757>), I analysed the relevant provisions of the Resource Management Act 1991 and the New Zealand Coastal Policy Statement. The relevant Resource Management Act provisions extend beyond section 6(c) of the Resource Management Act. Section 6(c) states that all persons exercising powers and functions under the Act are “to recognise and provide for (c) the protection of significant indigenous vegetation and significant habitats of indigenous fauna”. Another relevant Resource Management Act provision is section s6(a), which requires all persons exercising powers and functions under the Act “to recognise and provide for the preservation of the natural character of the coastal environment, wetlands, rivers and lakes and their margins and their protection from inappropriate subdivision, use and development”. Section 7(d) requires all persons exercising functions and powers under the Resource Management Act to “have particular regard to (d) intrinsic values of ecosystems”. The naturalness of habitats and ecosystems is an important component of natural character. This includes the naturalness of ecosystem/habitat structure, species composition, and ecological and other natural processes; the lack of impact from human structures and activities; and the naturalness of sound and light regimes.
14. The most relevant part of the New Zealand Coastal Policy Statement 2010 is Policy 11 (Indigenous biological diversity). Policies 13 (Preservation of natural character) and 14 (Restoration of natural character) are also highly relevant.
15. The National Policy Statement for Indigenous Biodiversity 2023 addresses more than significant natural areas (SNAs), as should the PFNDP. The objective is to “maintain indigenous biodiversity across Aotearoa, New Zealand, so that there is at least no overall loss in indigenous biodiversity after the commencement date” (August 2023). There are 17 policies, most of which do not specifically address SNAs. Subpart 2 of the Implementation addresses the assessment (3.8), identifying SNAs in district plans (3.9), managing adverse effects of subdivision, use and development on SNAs (3.10), SNAs on specified Māori land

- (3.12), geothermal SNAs (3.13), plantation forestry activities (3.14), managing the adverse effects established activities on SNAs (3.15). Subpart 2 also addresses indigenous biodiversity outside of SNAs.
16. Subpart 3 of the National Policy Statement for Indigenous Biodiversity requires *“local authorities to work in partnership with tangata whenua and owners of specified Māori land to develop, and include in policy statements and plans, objectives, policies, and methods that, to the extent practicable: (a) maintain and restore indigenous biodiversity on specified Māori land, and (b) protect SNAs and identified taonga on specified Māori land.”* (3.18)
  17. Subpart 3 (3.21) also includes a requirement for local authorities to *“include objectives, policies and methods their ...plans to promote the restoration of indigenous biodiversity, including through reconstruction of areas.”* *“Local authorities must consider providing incentives for restoration in priority areas referred to in subclause (2)”*, particularly for specified Māori land. For activities *“in areas prioritised for restoration, local authorities must consider requiring conditions for restoration or enhancement on resource consents that are new or being reviewed, and (b) recommending conditions on any new designations.”*
  18. I have considerable experience with planning approaches related to indigenous biodiversity. While many favour the inclusion of identified SNAs in district plans as a mandatory approach, other approaches can work better in some districts (especially those with large tracts of indigenous cover on private and Māori land). In these cases, appropriate regulatory mechanisms are triggered by activities that clear indigenous vegetation and/or require larger earthworks and/or drainage. At the time of a proposal, an assessment should be made as to whether the area affected is “significant” using the criteria in Appendix 1 of the National Policy Statement for Indigenous Biodiversity or Appendix 5 of the RPS. The council also has access to its initial assessment of SNAs. Ecological assessments should also be made for subdivisions, given the generally implicit additional development opportunities they provide.
  19. For the approach in paragraph 18 to work effectively, the Council needs access to current aerial and satellite imagery to detect changes in land cover and use. Some landowners/ developers clear first and seek permission later if required. There should be some type of penalty associated with this approach. As an ecologist, it can be hard to assess the pre-clearance or pre-drainage ecological significance of an area when little of the former state remains. There also needs to be some Council support for ecologists when developers or their agents bully ecologists to change their reports to be more favourable to the development.
  20. As I described in the Indigenous Biodiversity Guidance Note for the Quality Planning website, effective biodiversity protection, maintenance, and restoration require incentives as well as regulatory tools. The Council has chosen to prepare a district plan without non-regulatory methods. Given the importance of non-regulatory methods to achieving biodiversity maintenance outcomes (in the Indigenous Biodiversity NPS), an exception should be made for this chapter. The guidance note lists a variety of non-regulatory methods. Maybe the Council could hold a workshop where ecologists, planners, tangata whenua, and others can discuss options for non-regulatory tools that would work best in the Far North. Such tools could also be used to promote “protection” activities such as pest plant and animal control in association with Northland Regional Council and ecological restoration communities.

21. Given the magnitude and scope of the proposed changes in the section 42A report, I consider it would be appropriate for the Council to
- a. Either prepare a plan variation so that ecologists, planners, tangata whenua and the public can properly consider the effectiveness of the new proposed provisions or
  - b. As a second option, circulate a revised chapter to all those who made submissions for their expert ecologists and planners to discuss (by expert conferencing or similar) prior to another hearing in a few months.

## ECOSYSTEMS AND INDIGENOUS BIODIVERSITY RULES

22. Rule IB-R1 PER-1-6 makes it a permitted activity “to create or maintain a 20m setback from a building used for a vulnerable activity to the edge of the indigenous vegetation area”. The PFNDP (<https://farnorth.isoplan.co.nz/eplan/rules/0/95/0/1003/0/68>) defines “setback” as

*“the horizontal distance between any activity or development and any relevant boundary, or waterbody or significant natural area or feature.*

- a. *Where any building or part of a building is required to be set back from any site boundary. No part of that building shall be closer to the site boundary than the minimum distance specified, except that the eaves of any building and any roof, gutter or downpipe may project over any setback by not more than 600 mm, provided that where any building line restriction has been imposed, or any road widening is required by this Plan or otherwise in accordance with the Local Government Act 1974, and its amendments, the setback shall be determined from the proposed final site boundary.*
- b. *Where an activity or development is required to be set back from a water body (other than the coastal marine area), the setback shall be measured from the bank of a river or the margin of a lake or wetland.*
- c. *Where an activity or development is required to be set back from any heritage or resource feature identified in the Plan, the setback shall be measured from the boundary of the heritage or resource feature as shown in the District Plan Maps.*

23. This definition of setback is related to the location of buildings relative to waterbodies or significant features/ vegetation. It does not seem to be appropriate for this rule. As written, this rule allows vegetation, whether significant or not, to be cleared from 20m around any “vulnerable building”, whether it is new or existing. Such clearance seems to be excluded from the clearance limits for requiring consent. A cleverly placed building could result in the clearance of 1000m<sup>2</sup> regardless of the quality of the vegetation /wildlife habitat as a permitted activity. A subdivision in native vegetation/wildlife habitat could lead to considerable forest clearance, resulting in a highly fragmented area prone to pest plant invasion and heavily modified new margins. This clearance allowance seems to be unrelated to the protection of water bodies or natural features.

24. Instead, it provides an opportunity for clearance regardless of the quality/values of the area being cleared. Based on the operative plan, I would say that the purpose of this clearance is nominally to protect the building from fire and potentially reduce the risk of fire associated with this building from spreading to a larger area. Such an approach is valid when the vegetation has been repeatedly cleared and is dominated by high-risk flammable species, especially pest plants like pampas, woolly nightshade/tobacco weed, gorse, wattles, and pines. This is not native vegetation. However, the provision applies equally to high-quality native vegetation.

25. As an ecologist, I have debated with planners and FENZ staff many times about reducing the 20m clearance zone in areas of higher quality/ more mature native vegetation. I have seen many examples where the cleared native vegetation is progressively replaced by more flammable vegetation with increasing levels of pest plants. The “end result” is a highly flammable area with few, if any, native species. In areas with more mature native vegetation, every effort should be made to locate buildings outside of and away from this vegetation. Where this is not possible, the cleared area should be minimised as much as possible, and fire-resistant native species should be planted to minimise the fire risk.
26. In areas like the Russell Peninsula, which has a high proportion of indigenous vegetation cover, there needs to be coordinated actions between agencies to prevent fires. This should include minimising the highly flammable pest plants along accessible margins such as roads (e.g. undergrounding power lines in areas with tall native vegetation to avoid continuous pruning by Top Energy leading to more flammable weedy margins). Other actions (also outside the scope of the District Plan) would include advocating for a more nuanced FENZ fire-risk rating in the Far North. At present, there are only two spatial categories (north and south). There needs to be a provision to subdivide the southern section to recognise the often-significant fire risk differences between the east and west coasts, especially in El Nino years. With only one classification for the southern three-quarters of Northland, FENZ leaves the declaration of the restricted and prohibited fire seasons in El Nino seasons too late in the East Coast, with people lighting fires that become uncontrolled and requiring emergency services.
27. I consider that the permitted-activity clearance of indigenous vegetation around “vulnerable buildings” should be reduced to 5m and that there be a requirement to plant and maintain non-flammable native vegetation in this space. Where pest plants like pampas, woolly nightshade/tobacco weed, gorse, wattles, and pines dominate, a 20m clearance (or more in some locations) should be permitted. The difference between this type of vegetation and indigenous vegetation does need to be clearly defined, and landowners/ developers must be provided with images showing the difference. This needs to help landowners and developers distinguish between easily confused species, such as native toetoe in parts of the Kaipara catchment, and the pest plant pampas, which predominates in the Bay of Islands.
28. Environment benefit subdivision (SUB-R6) is supported as an alternative type of provision that can protect and restore indigenous biodiversity.
29. Since the PFNDP does not include SNAs, the indigenous vegetation clearance and associated land disturbance allowances in IB-R4 are confusing. I recommend clearance be limited to 100m<sup>2</sup>/ year/lot. Otherwise, it should be a discretionary activity requiring a qualified ecologist's report. Having a definition of indigenous vegetation with illustrated examples would clarify where this requirement would apply. Areas dominated by pest plants are not indigenous vegetation and can have more generous permitted vegetation clearance allowances.

## DEFINITIONS

30. The planning report stated that no definitions were provided by Pacific Eco-Logic.
31. The NPS for Indigenous Biodiversity contains the following definitions:

- a. **Indigenous biodiversity** means the living organisms that occur naturally in New Zealand, and the ecological complexes of which they are part, including all forms of indigenous flora, fauna, and fungi, and their habitats
- b. **Indigenous vegetation** means vascular and non-vascular plants that, in relation to a particular area, are native to the ecological district in which that area is located
- c. **restoration** means the active intervention and management of modified or degraded habitats, ecosystems, landforms, and landscapes in order to maintain or reinstate indigenous natural character, ecological and physical processes, and cultural and visual qualities, and may include enhancement activities
- d. **suitably qualified ecologist** means a professional ecologist with a background and expertise in conducting terrestrial ecological assessments
- e. (1) **Maintaining Indigenous biodiversity requires:**
  - i. (a) the maintenance and at least no overall reduction of all the following: (i) the size of populations of indigenous species: (ii) indigenous species occupancy across their natural range: (iii) the properties and function of ecosystems and habitats used or occupied by indigenous biodiversity: (iv) the full range and extent of ecosystems and habitats used or occupied by indigenous biodiversity: (v) connectivity between, and buffering around, ecosystems used or occupied by indigenous biodiversity: (vi) the resilience and adaptability of ecosystems; and
  - ii. (b) where necessary, the restoration and enhancement of ecosystems and habitats.

#### COASTAL ENVIRONMENT AND SCHEDULE OF NOTABLE TREES

- 32. Non-regulatory methods should be included in the coastal environment chapter to provide incentives for protecting indigenous biodiversity in the coastal environment. The terrestrial coastal environment is often narrow and modified. It is also highly vulnerable to many changes brought about by climate change (including rising sea levels and marine heat waves, increased and/or stronger storms). Pohutukawa are vulnerable to myrtle rust, and so their ongoing survival is not assured. Protecting and restoring naturalness, including high and outstanding natural character, is addressed in Policies 13 and 14 of the NZCPS.
- 33. The Northland coastal environment has individual and small groups of native trees, such as mature pohutukawa, puriri, and kowhai, that are too small to be mapped at the regional (natural character) or district level (potential SNAs). When mapping natural character for the Regional Policy Statement for Northland, I visited or viewed much of the Northland coast by vessel or via land. I developed a strong appreciation for the ecological value and character of these mature trees, which occupied an area that was too limited to be included in the RPS maps.
- 34. When the Far North District Council was developing its plan, I responded to an opportunity to provide information on some of these individual trees or groups of trees for the proposed Schedule of Notable Trees. I was told by Council staff that the Council only had a very limited budget for an arborist to view a limited number of trees. Even though I am a qualified ecologist, the Council staff were not prepared to accept my assessment of a notable tree, so most of the incomplete list I submitted was not included in the Schedule. At the same time, the Council retained many non-native trees, including some species that are pest plants.

35. Mature pohutukawa, puriri, and kowhai in the coastal environment need protection. There are two main ways to do this:
- a. Include a rule requiring consent to significantly prune or fell mature pohutukawa, puriri and kowhai trees in the coastal environment.
  - b. Expand Schedule 1 Notable Trees to include these isolated mature pohutukawa, puriri, and kowhai trees in the Far North coastal environment.
36. Schedules 7 and 8 (Schedules of high and outstanding natural character) should be updated to include the outcomes of my more recent natural character assessments, especially in the Bay of Islands and Far North. I used a quantitative methodology for measuring natural character (<https://researchcommons.waikato.ac.nz/items/278e261c-33db-43dd-a8a8-26affa636c7e>) in 2012 for the Proposed Regional Policy Statement for Northland. A few areas I previously ranked as having high natural character in the Bay of Islands have since been cleared, and some additional areas are of outstanding natural character. I am seeking the inclusion of additional Far North sites because I did not have all the relevant information when assessing the ecological values of these areas originally. I ranked many sites (such as around Parengarenga Harbour) as high. Still, when the RPS Hearing Commissioners made their decisions, they shifted the threshold for high natural character upwards, removing these sites, even though there were no submissions seeking their removal. I was exploring remote areas overseas at the time and had only occasional access to an internet connection, so was unable to provide effective guidance. I have since found more information on these Far North areas' ecological values, which would move some of the removed areas above the Commissioners' revised threshold for high.

Victoria Froude

22 July 2024