

SUMMARY STATEMENT OF SARAH FLYNN (ECOLOGY)

My name is Sarah Flynn, and I am an ecologist and Senior Principal at Boffa Miskell Limited. My areas of specialisation are botany and plant ecology.

The proposed works to expand Northport's footprint within the terrestrial environment include ~1.77 ha of earthworks encompassing part of a remnant dune system that extends along the Marsden Point beachfront.

Vegetation cover comprises mainly native kōwhangatara (spinifex) grassland on the mobile foredune, with a mix of buffalo grass and native pohuehue (interspersed with weedy exotic species and a row of planted pōhutukawa) on the dune crest. Pīngao (a sedge with a threat status of at risk – declining) is present on the foredune.

Duneland ecosystems (though degraded) are a characteristic feature of the eastern coastline within Waipu ED, however, dune remnant within the project footprint is not included within any significant natural area identified by the Department of Conservation, or in any regional or district plans.

I evaluated the duneland vegetation within the project footprint using proposed Northland Regional Plan (pRNP) significance criteria and EIANZ ecological impact assessment guidelines, assigning the feature an overall 'Moderate' ecological value.

Rule D.2.18 of the pRNP requires a system-wide approach to evaluating indigenous biodiversity when assessing and managing adverse ecological effects. I assessed adverse effects on indigenous biodiversity as minor (though permanent) relative to the wider duneland ecosystem in Waipu ED, and moderate at the scale of the Marsden Point beachfront.

Mitigation of local-scale effects can be achieved by enhancing the indigenous dune ecosystem present along the Marsden Point beachfront, but the area has poor ecological restoration potential, so I have recommended that funds for such work are instead provided to a community organisation such as Bream Bay Coastal Care Trust to enable restoration of dune ecosystems with better potential elsewhere in Waipu ED. I also recommended requiring a Lizard Management Plan ('LMP') as a condition of consent. Both of my recommendations have been adopted by Northport in its proposed suite of conditions.

Provisions in the operative National Policy Statement on Indigenous Biodiversity (NPS-IB) NPS-IB pertaining to Significant Natural Areas are not relevant to this project, as the site is not

mapped as an SNA in a District or Regional Plan. Outside of SNAs, the NPS-IB applies the effects management hierarchy only to significant adverse effects on indigenous biodiversity, which is also not relevant in this case.

Adverse effects on indigenous biodiversity must be managed to give effect to the objective and policies of the NPS-IB, by recognising and providing for the maintenance of indigenous biodiversity. In my opinion, the effects management measures as proposed in the consent conditions will meet this requirement.

The authors of the technical review of terrestrial ecology matters generally agree with my assessment in terms of the level of effect, and that recommended effects management measures will reduce ecological effects to levels that are no more than minor. The reviewers seek a detailed “duneland restoration and compensation plan” as condition of consent to demonstrate NPS-IB compensation principles are met, however I do not consider this is necessary as the effects are not of a sufficient threshold to require application of the mitigation hierarchy under the NPS-IB.

I did not attend expert conferencing, nevertheless I understand no matters pertaining to terrestrial ecology were raised.

Ms Juliane Chetham notes in her evidence¹ recent surveys of copper skinks, shore skinks, and katipō spiders in sites around Waipu Cove, Uretiti and Ruakākā, and that these species could potentially inhabit the dune and esplanade reserve area. While I agree that these species could be present within the strip of grassland and pōhuehue vegetation along the dune crest, I consider the likelihood that a viable native lizard population persists at Marsden Beach is low, due to historic clearance and modification associated with the development of the surrounding area, and given the limited extent of habitat available and the presence of mammalian predators².

Katipō are strictly coastal dune specialists, and are generally confined to indigenous duneland ecosystem remnants, as exotic species established for dune stabilisation offer poor quality katipō habitat. While it is possible that katipō persisted at Marsden Beach in pockets of duneland vegetation as the surrounding area was developed, this species is notably absent from sites in close proximity to human habitation, and appears very susceptible to habitat fragmentation and frequent disturbance.

¹ Paragraph 3.16.

² See paragraphs 7.14 and 7.15 of my evidence dated 24 August 2023.

Native lizards and katipō are all cryptic species that are difficult to detect when populations are small and vegetation cover is complex, except by way of destructive habitat searches. For this reason, rather than undertaking surveys that would not reliably confirm presence or absence, I factored the potential presence of relict populations of at-risk terrestrial fauna (lizards in particular) into my ecological evaluation.

I consider that comprehensive survey and management of indigenous terrestrial fauna can be appropriately achieved during the process of vegetation clearance through development and implementation of a fauna management plan. I note that native lizards and katipō are all protected under the Wildlife Act, and salvage and relocation of animals would require an authorisation from the Director-General of Conservation. Accordingly, detailed protocols for vegetation clearance, fauna capture, and release site selection and preparation would be developed in consultation with the Department of Conservation and Patuharakeke Te Iwi Trust's Pou Taiao team.

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