BEFORE THE WHANGAREI DISTRICT COUNCIL AND NORTHLAND REGIONAL COUNCIL

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	a Resource Consent Application by Northport Limited under section 88 of the Resource Management 1991 for a port expansion project at Marsden Point
APPLICATION NO.	APP.005055.38.01 LU 2200107

STATEMENT OF EVIDENCE OF SARAH FLYNN

(ECOLOGY)

24 August 2023

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1.0 QUALIFICATIONS AND EXPERTISE

1.1 My name is Sarah Megan Flynn, and I am an ecologist and Senior Principal at Boffa Miskell Limited, a national firm of consulting planners, ecologists and landscape architects. I hold the qualifications of Bachelor of Science (Botany), Masters of Science with Honours (Botany) and PhD (Environmental Science) from the University of Auckland. I have worked as a professional ecologist for 27 years. My areas of specialisation are botany and plant ecology.

1.2 In the course of my work I have undertaken district-wide surveys to identify Significant Natural Areas, prepared numerous ecological assessments including for major infrastructure projects, undertaken a variety of projects pertaining to ecosystem restoration and management, and provided ecology-related strategic and policy advice for a wide range of clients around New Zealand, including local authorities, land developers, infrastructure and power sectors.

1.3 I am an experienced expert witness and have presented evidence in numerous council and Environment Court hearings.

1.4 I was engaged by Northport Ltd in 2023 to prepare an assessment of effects for the project in relation to effects on terrestrial vegetation.

1.5 I undertook a site visit (walkover of the Marsden Point Beach foreshore) on 7 March 2023, and subsequently undertook an assessment of effects on vegetation and flora associated with the proposed port expansion (Vegetation Assessment).[1] I also prepared a further memorandum dated 20 July 2023 in response to Council's S92 request for clarification of certain issues.

1.6 My assessment primarily concerned vegetation and flora values, although I briefly addressed potential fauna habitat values in response to the Council's Section 92 request. I did not assess terrestrial habitat values for avifauna, as this is addressed in the reporting and evidence of Dr Leigh Bull.

[1] Northport Eastern Expansion: Vegetation assessment, 5 May 2023.

2.0 CODE OF CONDUCT

2.1 I have read the Code of Conduct for Expert Witnesses issued as part of the Environment Court Practice Note 2023. I agree to comply with the code and am satisfied the matters I address in my evidence are within my expertise. I am not aware of any material facts that I have omitted that might alter or detract from the opinions I express in my evidence.

3.0 SCOPE OF EVIDENCE

3.1 In my evidence I will:

(a) Set out an executive summary of my findings;

(b) Summarise my assessment of terrestrial vegetation and habitat values within the project footprint,

(c) Describe the magnitude and level of ecological effects on these values arising from the proposed development, and recommended mitigation measures;

(d) Respond to matters pertaining to terrestrial ecology raised in submissions and the Council s42A report;

(e) Briefly evaluate the proposal in the context of the National Policy Statement on Indigenous Biodiversity (NPS-IB); and

(f) Briefly comment on relevant conditions proposed by Northport.

4.0 EXECUTIVE SUMMARY

4.1 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.

4.2 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.

4.3 Duneland ecosystems (though degraded) are a characteristic feature of the eastern coastline within Waipu ED, and large parts have been identified as significant natural areas in the Department of Conservation's 'Protected Natural Areas' survey programme. The 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.

4.4 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.

4.5 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.

4.6 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.

4.7 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.

4.8 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.

4.9 Ecologists who undertook the technical review of terrestrial ecology matters generally agree with the outcome of 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. I note that 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.

5.0 SITE AND CONTEXT

5.1 Northport is located at the entrance of Whangarei Harbour, Northland. The site is situated within the Waipu Ecological District and Eastern Northland Ecological Region.

5.2 To the immediate east of Northport, an approximately 750 m beach is bounded to the east by the CINZ jetty.

5.3 A comprehensive description of the site and its context is set out in my Vegetation Assessment at section 3.0.

6.0 THE PROPOSED ACTIVITY

6.1 Northport Limited is seeking consents to authorise a proposed expansion of its facilities in Whangarei Harbour, comprising an approximately 13.7 ha footprint at the eastern end of the existing port,

together with a new wharf and dredging. A full description of the proposal is set out in the application and AEE.

6.2 Works within the terrestrial environment (outside of the CMA) include ~1.77 ha of earthworks on the Whangerei District Council esplanade reserve to expand Northport's footprint eastward of the existing reclamation.

7.0 TERRESTRIAL VEGETATION AND HABITAT

7.1 The area of terrestrial vegetation and habitat that I assessed is a strip of remnant dune system along the Marsden Point beachfront. The beachfront between the existing Northport site and the CINZ jetty is approximately 750 m in length, and the dune feature is reduced to a single foredune and crest, as back dunes have been stabilised and converted to industrial land. The proposed development footprint encompasses the westernmost ~360m of the dune.

7.2 Vegetation cover on the dune at Marsden Point beach comprises two fairly distinct types, these being native kōwhangatara spinifex *(Spinifex sericeus)* grassland on the mobile foredune, and a patchy mix of exotic buffalo grass *(Stenotaphrum secundatum)* and native pohuehue *(Muehlenbeckia complexa)* which forms a dense sward on the dune crest. These two vegetation types intergrade at the upper portion of the dune face.

7.3 Kikuyu *(Cenchrus clandestinus)* is the dominant cover on the grassed reserve behind the dune crest, and has overgrown the dune crest in places.

7.4 Pīngao *(Ficinia spiralis),* a sedge with a conservation status of at risk – declining (de Lange et al., 2018) occurs in a few patches among the spinifex-dominated vegetation type within the proposed works footprint, as well as eastward of the proposed works extent. Patches range in size from a few tussocks to ~25 m^2.

7.5 Other species present within the dune grasslands are exotic herbaceous annuals (fleabane, dandelion, groundsel etc), and

"garden escape" weed species including smilax (*Asparagus asparagoides*), bushy asparagus (*A. aethiopicus*), agapanthus (*Agapanthus praecox*), ice plant *(Carpobrotus edulis)* and rose geranium *(Pelargonium graveolens).*

7.6 Approximately 10 planted pōhutukawa trees (between ~4 and 8m tall) are present among the buffalo grass and pohuehue on the landward margin of the dune crest. Two pine trees and several Sydney golden wattle (mostly dead) are also present.

7.7 The dune vegetation and habitat within the Marsden Point beachfront is a small remnant of the original duneland ecosystem, which has otherwise been built over and stabilised. The extent of existing development restricts the potential occupancy of indigenous duneland species, communities and ecosystem dynamics, even if the foredune area were to be restored and pro-actively managed.

Ecological context

7.8 Fairly extensive duneland communities remain within the 23.5 km-long stretch of eastern coastline within Waipu ED. The large expanse of dune systems from the eastern side of Marsden Point to the northern side of the Waipu River is identified as the Ruakaka Dunelands Significant Natural Area (Q07/128) in the survey of natural areas in Waipu ED commissioned by the Department of Conservation.[2] The area within the Project footprint westward of the CINZ jetty is not encompassed within any SNA identified in the Whangerei District Plan or proposed Northland Regional Plan (pRNP).

7.9 Historically, Waipu ED dune systems would have included pohutukawa forest communities on ancient, consolidated dune ridges, with kānuka forest and pohuehue shrubland on stable rear dunes. Mobile dunes dominated by spinifex and pīngao would have supported a variety of other duneland plants including sand tussock

[2] Lux, J., Martin, T., & Beadel, S. (2007). *Natural areas of Waipu Ecological District: Reconnaissance survey report for the Protected Natural Areas Programme* [New Zealand Protected Natural Areas Programme]. Wildland Consultants Ltd for Department of Conservation, Northland Conservancy.

(*Poa billardierei)*, sand coprosma (*Coprosma acerosa*) sand daphne (*Pimelea villosa*), sand sedge (*Carex pumila*) and shore spurge *(Euphorbia glauca)*, all of which are now threatened or at risk, and are uncommon or absent from Waipu ED.

7.10 Dunelands are a naturally uncommon ecosystem at a national scale (Holdaway et al., 2012), but are well represented in the Waipu ED.

7.11 However, most dunelands within Waipu ED are degraded by weed species and a history of efforts to stabilise and convert them to productive land uses. Gorse and pampas now dominate large parts of the backdunes, and exotic grasses such as buffalo grass form dense swards on dune crests and more sheltered slopes. Proactive restoration and management actions to conserve these ecosystems are largely community-led (I am aware that Bream Bay Coastal Care Trust has undertaken restoration and pest management work on coastal land held by the Department of Conservation, and I acknowledge that others, including corporate entities and hapu/iwi/Māori, may undertake formal or informal restoration and management in the area).

Ecological values

7.12 I evaluated the ecological values of the terrestrial vegetation (and associated flora and fauna habitat) within the Project footprint using significance criteria in Appendix 5 of the Northland Regional Policy Statement (NRPS), and, in response to the S92 request for further information, with specific reference to the EIANZ Guidelines (Roper-Lindsay et al., 2018).[3] Assessment matters for assigning ecological value using the EIANZ method are essentially the same as those used to evaluate significance in the NRPS, i.e., representativeness, rarity and distinctiveness, diversity and pattern, and ecological context.

7.13 I did not undertake surveys for lizards or other native fauna as part of the field assessment. I note that the spinifex, rank grass and

[3] Roper-Lindsay, J., Fuller S.A., Hooson, S., Sanders, M.D., Ussher, G.T. 2018. Ecological impact assessment. EIANZ guidelines for use in New Zealand: terrestrial and freshwater ecosystems. 2nd edition.

pohuehue vegetation cover along the ridge crest offers potential habitat for native lizards. The Department of Conservation's herpetofauna database includes numerous records of shore skink *(Oligosoma smithi)* in dunelands throughout Bream Bay, while shore skink and ornate skink (both at risk – declining) have been sparsely observed in forest remnants and rural parts of the wider One Tree Point/ Ruakaka area.[4]

7.14 The Project Site and adjacent beachfront has minimal intact, remnant habitat, with much of the vegetation cover having regenerated following prior clearance. A mouse was observed in a burrow in the spinifex grassland, and animal tracks were noted. I consider that the area is likely to attract other mammalian predators (hedgehogs and domestic cats, in particular).

7.15 Therefore, while the site may provide habitat for a small native lizard population (most likely shore skink), the probability of a viable native lizard population persisting at this site is fairly low, and so I am comfortable that a lizard survey (and any subsequent responses) can be completed prior to construction, as part of a Construction Environment Management Plan.

7.16 I assessed the duneland vegetation as of high value with respect to rarity and distinctiveness attributes (due to the presence of pīngao, and potentially shore skink), moderate value with respect to representativeness, and low value for other attributes. This gives the feature an overall 'Moderate' value.

8.0 ASSESSMENT OF EFFECTS

8.1 I evaluated magnitude and level of effect at both the local footprint scale, and relative to the Waipu Ecological District ('ED'), in accordance with pRNP Policy D.2.18 that directs a system-wide approach should be taken in relation to evaluating indigenous

[4] https://iNaturalist.nz records accessed 5 May 2023.

biodiversity when assessing and managing adverse ecological effects.

8.2 The proposed development will result in the removal of a ~10 m wide strip of a simplified but predominantly indigenous vegetation community, and a further ~10 – 20 m band of mixed native and exotic rank grass and shrubland, along ~360 m of foredune on the Marsden Point beachfront. Several small to medium sized, planted pōhutukawa trees will also be removed. The total extent of vegetation clearance is ~1.77 ha.

8.3 Vegetation clearance within the works footprint will remove a small number of pīngao plants along the beachfront westward of Marsden Point. Several pīngao patches along the immediately adjacent portion of beach will be retained. The loss of a small number of plants within the development footprint will not alter the prospective long-term viability of the pīngao population along the adjacent beachfront (which is likely to require conservation management in any case), or in the wider Waipu ED (the stronghold of which is in the Ruakākā Dunelands and southwards along the coastal margin).

8.4 The indigenous duneland vegetation community within the works footprint and adjacent beachfront is somewhat isolated, and very reduced in extent and species richness, as a result of surrounding industrial development, and is an area of lower sensitivity relative to dune systems elsewhere in Waipu ED.

8.5 At the “system-wide” scale of the wider Waipu ED duneland ecosystem, this represents a minor (though permanent) effect on the district-wide extent and quality of indigenous duneland vegetation.

8.6 At the scale of the immediate site and surrounds (i.e. project footprint), the works will result in a ~50% reduction in the extent of degraded indigenous foredune vegetation along the beachfront, which is an adverse effect of moderate magnitude and level in this local-scale context.

9.0 EFFECTS MANAGEMENT

9.1 Weeds, pests, and human disturbance are the primary threats to duneland communities both on the Marsden Point beachfront and within the wider Waipu ED. In the case of the subject site, encroachment of buffalo grass and other introduced plants into the duneland has reduced the extent of the indigenous dune ecosystem, and stabilised mobile dune systems, limiting the extent of occupancy by indigenous sand-binding species.

9.2 Management of invasive exotic plants, and restoration planting to increase the cover of pīngao and other sand-binding plants, could be undertaken along the Marsden Point beachfront to maintain and expand the extent of indigenous dune ecosystem and mitigate local-scale loss of the duneland vegetation and habitat within the project footprint. Pīngao is readily cultivated and restored to duneland and regenerates well when browsing pests are controlled.

9.3 However, I note that the Marsden Point beachfront is public reserve land that is primarily managed for amenity purposes. Opportunities for reinstatement or enhancement of the duneland ecosystem are constrained due to stabilisation and development of the rear dunes. Exotic grasses have been intentionally established along the dune crest in order to stabilise it, and vegetation management may result in increased movement of sand which could cause a nuisance to adjacent operations. For these reasons, I consider that enhancement of the remaining foredune at Marsden Point Beach would likely have limited ecological benefits.

9.4 In my opinion, a more suitable mitigation alternative is to provide funding to the Bream Bay Coastal Care Trust at an amount equivalent to that required to undertake weed management and revegetation of the Marsden Point beach dune system, over an area approximately equivalent to the impact site. This would enable resources to be directed towards dune ecosystems with higher restoration potential along the Waipu ED's eastern coastline.

9.5 In addition, I recommend that a Lizard Management Plan ('LMP') is required as a condition of consent which includes a comprehensive lizard survey and salvage within the foreshore vegetation to be removed.

9.6 As I note later in my evidence, both of my recommendations have been adopted by Northport in its proposed suite of conditions.

10.0 NATIONAL POLICY STATEMENT ON INDIGENOUS BIODIVERSITY (NPS-IB)

10.1 The NPS-IB came into effect on 4 August 2023. This post-dates my Vegetation Assessment. In any event, I have undertaken an assessment of the proposal against the NPS-IB, as discussed below.

10.2 The NPS-IB contains a single objective, which is to maintain indigenous biodiversity across Aotearoa New Zealand so that there is at least no overall loss of indigenous biodiversity after the commencement date of the NPS-IB.

10.3 As set out in Part 3, implementation of much of the NPS-IB falls to local authorities, including making or changing policy statements and plans involvement of tangata whenua as partners in the management of indigenous biodiversity, identification and management of Significant Natural Areas (SNAs) and Specified Highly Mobile Fauna Areas (HMFAs), and ensuring that indigenous biodiversity outside of SNAs is managed by applying the effects management hierarchy.

10.4 NPS-IB operative provisions for new use or development that affects indigenous biodiversity are separated into activities within or affecting SNAs (clause 3.10), and new use or development outside of SNAs (clause 3.16). I address each below.

10.5 Clause 3.10 of the NPS-IB contains specific requirements relating to indigenous biodiversity within and outside of Significant Natural Areas (SNAs).

10.6 As I note in paragraph 7.8 above, no terrestrial SNAs are affected by the Northport application. Therefore, the proposed works do not trigger Clause 3.10.

10.7 With respect to maintaining indigenous biodiversity outside SNAs, Clause 3.16(1) of the NPS-IB requires that any significant adverse effects are managed by applying the effects management hierarchy.

10.8 I note that the EIANZ impact assessment method does not use the term 'significant' when evaluating effects on biodiversity, in order to minimise confusion with the use of the term 'significant' in relation RMA Section 6(c) assessments of vegetation and fauna habitat.

10.9 The Ministry for the Environment's Quality Planning resource[5] describes 'more than minor' adverse effects as those that are *noticeable and may cause an adverse impact but could be potentially mitigated or remedied,* whereas 'significant' adverse effects are *noticeable and will have a serious adverse impact on the environment but could potentially be mitigated or remedied.*

10.10 The EIANZ method for ecological impact assessment evaluates the level (seriousness) of effect as a combination of ecological value and effect magnitude. Applying this method, I determined that proposed development will have a moderate level of ecological effects in the context of the Marsden Point beachfront site, and a low level of effects at the scale of Waipu Ecological District. I consider that the effects are noticeable and will cause a local-scale adverse impact, but that effects can be mitigated. Therefore, the anticipated ecological effects on terrestrial biodiversity in the local context are more than minor, but not significant.

10.11 Clause 3.16(2) of the NPS-IB requires that all other adverse effects on indigenous biodiversity must be managed to give effect to the objective and policies of the NPS-IB.

10.12 As I explain in Section 9 of my evidence, while adverse ecological effects could be effectively mitigated locally, I have recommended

[5] www.qualityplanning.org.nz/node/837

that the funds which would be required to undertake this work should instead be provided to a local community group such as Bream Bay Coastal Care Trust that currently undertakes dune restoration and management, as this will provide a greater ecological benefit.

10.13 A comprehensive lizard survey and salvage will also be required within the foreshore vegetation to be removed, in order to mitigate adverse effects on any native lizard populations present.

10.14 In my opinion, the mitigation measures outlined above will meet the objective and policies of the NPS-IB by protecting and restoring indigenous biodiversity as necessary to achieve the overall maintenance of indigenous biodiversity; and by recognising and providing for the maintenance of indigenous biodiversity outside of SNAs (Policy 8).

11.0 COUNCIL S42A REPORT

11.1 Ecologists Claire Webb and Sandy Huang reviewed the terrestrial ecology assessment prepared for the application and provided a technical memorandum (Appendix C12) that informed Councils' S42A report.

11.2 Ms Webb and Ms Huang consider the appropriate assessment scale to assess the magnitude and level of effect on terrestrial ecology for this project to be the site and its immediate surroundings rather than the Waipu ED. While they agree that a 'systems-wide' approach should be used (based on Rule D.2.18 of the pNRP), they state that a scale of scale of the site and its immediate surroundings is more appropriate because it would *"better capture the ecological value and geomorphology of the duneland ecosystem and vegetation being impacted*", and because it is a more conservative assessment.

11.3 Ms Webb and Ms Huang also raise a concern that using Waipu ED as the context for my assessment may not fully account for the significance of the feature as a remnant duneland ecosystem,[6]

[6] Technical memo – Terrestrial Ecology, p.3, 5.

because dunelands are recognised as an uncommon ecosystem type nationally, and information on the extent of dunelands in Waipu ED is likely to be somewhat out of date.

11.4 The direction in pNRP Policy D.2.18 to take a 'system-wide approach' when assessing the scale of an ecological effect on a large ecosystem recognises that considering only the portion of a feature that falls within a project footprint or its immediate 'zone of influence' tends to over-emphasise the magnitude of effect on the ecosystem as a whole. In this case, the Marsden Point beachfront forms the north-western tip of a continuous coastal dune ecosystem that extends ~23.5 km south to Waipu Cove.

11.5 Ms Webb and Ms Huang noted that no specific reasoning was given for the use of the 'ecological district' scale, and identified a concern that use of Waipu ED as a reference might dilute the effect size. However, I note that the geographical framework of ecological districts was derived from detailed analysis of topography, geology, climate, soil and biodiversity, for the purpose of understanding the relative conservation importance of specific areas of vegetation and habitat[7]. The ecological district is well recognised as an appropriate spatial context for evaluating ecological values and effects.[8]

11.6 Notwithstanding the above concerns, Ms Webb and Ms Huang concur with my assessment that the loss of extent would produce a moderate and low level of effect at the scale of the site and its surroundings, and the Waipu ED, respectively.[9] We agree that in accordance with EIANZ guidelines and the operative Whangerei District Plan, effects management is appropriate to mitigate a localised, moderate level of effect on indigenous vegetation and fauna habitat, and that the proposed management will reduce ecological effects to levels that are no more than minor.

11.7 In particular, Ms Webb and Ms Huang concur with my assessment that restoration of the remaining area of dune system on Marsden

[7] Norton & Overmars (2011) https://newzealandecology.org/nzje/3014.pdf
[8] Ecological Impact Assessment Guidelines (Roper-Lindsay et al 2018) – Section 4.2, p 48.
[9] Technical memo – Terrestrial Ecology, p.3.

Point beach would be of limited ecological benefit, and agree in principle with my recommendation to fund a coast care group with an "in-kind" dollar amount (i.e., at a 1:1 ratio) to enable resources to be directed to a site with higher restoration potential.[10]

11.8 Ms Webb and Ms Huang recommend requiring a duneland restoration and compensation plan as condition of consent, including the coast care group selected, the site selected for restoration and management, and the total "in-kind" dollar amount to be contributed to the fund, and / or its calculation methodology. They consider that this detail is necessary to demonstrate that the offsite restoration and weed management will successfully meet the NPS-IB compensation principles.

11.9 I do not agree that there is a requirement to meet NPS-IB compensation principles. As I note in paragraph 10.7 above, the NPS-IB only requires application of the mitigation hierarchy for *significant* adverse effects on biodiversity outside of SNAs. In this case, effects on indigenous biodiversity are not significant, and management must "recognise and provide for the maintenance of biodiversity". In my opinion, the effects management measures as proposed in the consent conditions will meet this requirement.

12.0 SUBMISSIONS

12.1 I have read the relevant submissions as they relate to terrestrial ecology, and make the following comments in response.

12.2 The Royal Forest & Bird Protection Society identifies adverse effects on terrestrial indigenous biodiversity as one of the reasons for its opposition to the proposal. However, I note that the Forest & Bird submission does not identify any specific effects on terrestrial ecological features as of concern, other than a general reference to due to climate change causing potential future loss of the habitat on

[10] Technical memo – Terrestrial Ecology, p.8.

the eastern side of the port facility, exacerbating loss of habitat in this area.[11] This matter is addressed in the evidence of Dr Leigh Bull.

12.3 The Director-General of the Department of Conservation identifies the permanent loss of terrestrial habitats as a key reason for their objection to the proposal.[12] However, the key effects of concern noted in the submission are on birds that use the coastal habitat. These matters are addressed in the evidence of Dr Leigh Bull.

13.0 CONDITIONS

13.1 I have read the draft conditions proposed by Northport and attached to the evidence of Mr Hood. Insofar as those conditions relate to management of effects on terrestrial ecology, I generally support those conditions. As noted earlier in my evidence, my specific recommendations have been included in the draft conditions, being (i) a contribution to works to protect indigenous duneland vegetation communities in the Ruakaka area, and (ii) completion of a lizard survey (and any subsequent responses) as part of a Construction Environment Management Plan.

SARAH FLYNN
(ECOLOGY)
Boffa Miskell Limited
24 August 2023

[11] Paragraph 33, p 9, Royal New Zealand Forest & Bird Society submission.
[12] Paragraph 4, p 4, Director-General of the Department of Conservation submission.