# Before the Independent Hearings Panel At Wellington City Council

Under	Schedule 1 of the Resource Management Act 1991
In the matter of	Hearing submissions and further submissions on the Proposed Wellington City District Plan

# Statement of supplementary ecological evidence of Nicholas Goldwater on behalf of Wellington City Council

Date: 3 September 2024

## INTRODUCTION

- 1 My full name is Nicholas Goldwater. I am employed as a Senior Principal Ecologist with Wildland Consultants Ltd ('Wildlands'), based in Auckland. I have been employed as a consultant ecologist with Wildland Consultants since 2008.
- 2 I have read the respective ecological evidence prepared by Dr Vaughan Keesing for Horokiwi Quarry and Dr Michael Anderson for Wellington International Airport Limited (WIAL). I have also read the planning evidence prepared by Jo Lester for WIAL.
- 3 I have prepared this supplementary statement of evidence in response to evidence submitted by the experts listed above to support the submissions and further submissions on the Proposed Wellington City District Plan (the Plan / PDP).
- 4 Specifically, this statement of evidence relates to the matters addressed in Hearing Stream 11 of the Wellington City Proposed District Plan in respect of Ecosystems and Indigenous Biodiversity.

## QUALIFICATIONS, EXPERIENCE AND CODE OF CONDUCT

- 5 My evidence in chief dated 9 August 2024 sets out my qualifications and experience in terrestrial ecology.
- 6 I confirm that I am continuing to abide by the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023, as applicable to this Independent Panel hearing.

# **RESPONSES TO EXPERT EVIDENCE**

## WC175 Lyall Bay Dunes

Dr Anderson has recommended that the extent of Significant Natural Area (SNA)
WC175 be reduced at the western end (closest section to airport) for the following reasons:

- 7.1 At Risk or Threatened bird species listed on *eBird<sup>1</sup>* as being found in this area are unlikely to breed at this site (and will only roost their infrequently).
- 7.2 Red-billed gulls are listed as Regionally Vulnerable, but that they are widespread and found throughout New Zealand.
- 7.3 That the eastern end is heavily modified (it has more cobbles and shingle than the western end due to the impacts of erosion).
- 7.4 The eastern end does not qualify as a regionally rare 'stable dune' or 'active dune' (as the eastern part of the SNA would).
- 8 Dr Anderson has also noted that the conservation statuses of birds in the SNA database need updating and he recommends that the seaward boundary of WC175 is clipped to the mean high-water mark.
- 9 I agree that the conservation statuses should be updated for as per Robertson et al. (2021)<sup>2</sup>. I also agree that the SNA should be clipped to exclude the intertidal zone. The latter point is also addressed in the evidence of Adam McCutcheon.
- 10 I do not agree, however, that the eastern end be removed from WC175.
- 11 Breeding is not a requirement for a site to meet the Rarity criterion of the RPS. Rather, the site must 'provide seasonal or core habitat for protected or threatened indigenous species'. Similarly, a key attribute for the Rarity criterion in Appendix 1 of the NPS-IB is that the site '*provides habitat* for an indigenous species that is listed as Threatened or At Risk Declining)...'.

<sup>&</sup>lt;sup>1</sup> A database that documents bird distribution, abundance, habitat use, and trends through checklist data collected within a simple, scientific framework.

<sup>&</sup>lt;sup>2</sup> Conservation status of birds in Aotearoa New Zealand, 2021. New Zealand Threat Classification Series 36. Department of Conservation, Wellington.

- 12 Regardless, there are five records of little blue penguin (At Risk Declining) on *iNaturalist*<sup>3</sup> that indicate birds are burrowing/denning at the eastern end of Lyall's Bay. All birds were found dead, most likely victims of dog attacks given that some of the bodies had puncture wounds consistent with dog bites. This part of the beach is also an off-leash area for dogs. One iNaturalist observation notes that a dead penguin was found 'metres from its burrow'<sup>4</sup>.
- 13 There are numerous records of red-billed gulls along Lyall Bay, including the eastern end. Red-billed gull has a national conservation status of 'At Risk Declining'. I note that Dr Anderson observed red-billed gulls roosting at the car park at the eastern end of Lyall's Bay; my colleague Nyree Fea and I also observed red-billed gulls roosting here during our site visit. It is not unreasonable to assume that this species would also roost along the eastern end of the beach.
- 14 Due to the presence of two 'At Risk Declining' bird species at the eastern end of the SNA, I consider that the boundary should remain unchanged notwithstanding adjustments with regard to the mean high-water mark.

# WC176 Moa Point Gravel Dunes

- 15 Dr Anderson states that the western end (closest section to airport) should be removed from WC176. The planner for WIAL (Jo Lester) has stated that the northern end of WC176 is needed temporarily during the construction period for the Southern Seawall Renewal Project. This would involve the stockpiling of materials, access to the seawall workface, and parking/standby area for construction plant.
- 16 In summary, Dr Anderson recommends that the SNA boundary should be modified for the following reasons:

<sup>&</sup>lt;sup>3</sup> A global citizen science database that records and verifies observations of fauna and flora.

<sup>&</sup>lt;sup>4</sup> https://inaturalist.nz/observations/208857422

- 16.1 Historically, the northern end of Moa Point beach has been substantially altered from its natural state (since c.1950s when airport construction began).
- 16.2 Given that the western end of the SNA (again, near the airport) is modified with fill (concrete, rocks, rubble placed there especially since 1988), rare birds are unlikely to roost or forage there.
- 16.3 Most of the At Risk and Threatened species listed as possibly using the site are also listed as highly mobile in Appendix 2 of the NPS-IB. In Dr Anderson's opinion, the sighting/presence of highly mobile fauna alone should not qualify a site as an SNA.
- 16.4 Appearance of shingle on the beach is mostly eroded hard fill.
- 16.5 Historical photos indicate the western end would have been rocky shoreline, but has been modified so that it appears to be a shingle beach.
- 16.6 The foreshore at western end is entirely artificial due to previous fill disposal while the eastern end mostly comprises sand rather than shingle.
- 17 Dr Anderson has also noted that the conservation statuses of birds in the SNA database need updating. I agree that threat classifications require updating for birds (as per Robertson et al. 2021).
- 18 I consider it highly likely that penguins would utilise features at the site such as rocks and boulders. I note that an abandoned nest was found in culvert just south of the SNA in 20165.

<sup>&</sup>lt;sup>5</sup> https://inaturalist.nz/observations/4522562

- 19 Although the NIWA study cited by Dr Anderson did not detect any evidence of banded dotterel breeding at the site, there are six records on iNaturalist of banded dotterel roosting and/foraging at the SNA. One observer reported seeing six adult birds at the site, which suggests the site provides important local habitat this species. It is pertinent that all observations were made in the western part of the site.
- 20 Based on these observations of banded dotterel and the presence of little blue penguin in close proximity to the site, I consider the western end of the site meets the 'Rarity' criterion under the RPS and NPS-IB. As such, I recommend that current extent of the SNA boundary remains unchanged.
- 21 The site also provides optimal habitat for indigenous skink species, noting that over 1,500 north grass skinks (Not Threatened) were salvaged during works to remove a hillock across the road from the SNA. Copper skink (At Risk – Declining) have also found approximately 500 metres along the coast east of the SNA and are likely to be present at the site.
- 22 Shingle on the beach may contain hard fill but appears to also be a mixture of naturally and artificially sourced material. The historical photo shown by Ms Lester (1951-1957) shows Moa Point beach originally had rocky platforms and shingle foreshore. It now appears to be reverting back to a shingle beach, since deposition of fill began in the 1950s.
- 23 I do acknowledge, however, that further investigation may be required to determine the true extent of naturally occurring shingle at the site.

#### WC109 Coast Escarpment broadleaved forest

- 24 The ecologist for Horokiwi Quarry, Dr Vaughan Keesing, states that the 'southern basin feature' should be removed from WC109 for the following reasons:
  - 24.1 The ecological values for the site have been extrapolated from the higher ecological values of the surrounding area within the 161-hectare SNA.

- 24.2 There are three distinctly different vegetation types within the southern basin feature of WC109, and none of these four types trigger the RPS23 criteria of significance. The area is not true coastal forest and therefore is not a rare habitat type (no other rare species or features; not diverse; no notable gradients, sequences, abiotic factors).
- 24.3 The site does not play an important functional role and its removal will not detract from the overall ecological value of WC109.
- 24.4 The area is not representative of Wellington coastal forest. Dr Keesing does not consider the southern basin feature to be of a coastal nature, as its assemblage does not reflect the coastal environment, and does not show tolerance or adaptation to coastal environments, or is indicative of a maritime regime. He states that the southern basin is not characterised as the coastal forest type that was originally found from the southeast Wellington coast to the northern Wairarapa coasts ('WF1 Titoki, ngaio forest', 3% remaining).
- 24.5 The site has little integrity, and it will have even less after the clearance of the southern and eastern portions, stating that the landowner currently has existing use rights to clear the most southern and eastern boundaries of the southern basin feature for quarry purposes.
- 25 The southern basin feature comprises a reasonably old stand of forest (c.70–80years old) that is currently within the notified mapping of the Coastal Environment. Most of the coastal region of Wellington City was originally characterised by the MF6 Forest Ecosystem (Singers et al. 2018)6, namely: kohekohe, tawa forest (but only c.1% now remains in Wellington City's coastal areas). None of the original canopy species are present at the southern basin

<sup>&</sup>lt;sup>6</sup> Forest Ecosystems of the Wellington Region. Greater Wellington Regional Council, Publication No. GW/ESCI-G-18-164, Wellington.

feature, although original sub-canopy species (i.e., for MF6: mahoe, porokaiwhiri, and kawakawa) were common.

- 26 I agree that the southern basin feature lacks diversity and there are no confirmed records of threatened species, acknowledging that threatened lizard species have been found in close proximity (e.g. ngahere gecko).
- 27 It was the rarity of coastal forest in Wellington City that I considered the qualifying criterion for the site rather than the quality of the vegetation. My original assessment was based on the location of the site relative to the boundary notified mapping of the Coastal Environment.
- 28 Since submitting my evidence in chief, I have been made aware of proposals put forward by landscape architect experts for the Council and the Quarry operator in Hearing Stream 8 to modify the notified Coastal Environment boundary. This line is a demarcation of the inland extent of the coastal environment for the purpose of engaging district plan provisions to manage coastal values under the New Zealand Coastal Policy Statement 2010 (NZCPS).
- 29 In summary, both experts recommended changes which would mean the area of disputed SNA would be now only partially within the coastal environment (Mr Anstey for the Council) or totally outside of it (Mr Bray for Horokiwi Quarry) (Figure 1).

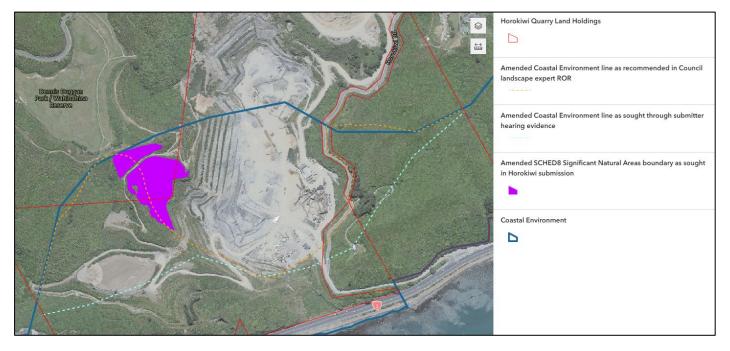


Figure 1: notified and expert recommended Coastal Environment lines relative to the disputed SNA (larger purple polygon).

- 30 I have no reason to believe the Panel will not agree with either of the experts. Given that both experts disagree with the notified mapping of the coastal environment and consider their alternatives to be more representative of the local maritime conditions, I am comfortable treating the area of disputed SNA as non-coastal forest, as is Dr Keesing's view.
- 31 Based on this likely change to the mapping of the Coastal Environment, and the fact that the site does not meet any other qualifying criteria, I am happy to take a more circumspect view and remove the southern boundary from WC109.

**Nicholas Goldwater** 

3 September 2024