# BEFORE THE INDEPENDENT HEARINGS PANELS APPOINTED TO HEAR AND MAKE RECOMMENDATIONS ON SUBMISSIONS AND FURTHER SUBMISSIONS ON PROPOSED PLAN CHANGE 1 TO THE NATURAL RESOURCES PLAN FOR THE WELLINGTON REGION

**UNDER** the Resource Management Act 1991 (the

Act)

**AND** 

IN THE MATTER of Hearing Stream 1 of Submissions and

Further Submissions on Proposed Plan

Change 1 to the Natural Resources Plan for the Wellington Region under Schedule 1 of

the Act

## STATEMENT OF EVIDENCE OF PHILIPPA NOEL CRISP ON BEHALF OF GREATER WELLINGTON REGIONAL COUNCIL

**TECHNICAL EVIDENCE (ECOLOGY)** 

HEARING STREAM 1 – Schedules and Threatened Species
Objectives

4 November 2024

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#### **INTRODUCTION**

- 1 My full name is Philippa Noel Crisp I am an Associate Ecologist.
- I have prepared this statement of evidence on behalf of Greater Wellington Regional Council (the Council) in respect of technical matters arising from the submissions and further submissions Proposed Plan Change 1 to the Natural Resources Plan for the Wellington Region (PC1).
- Specifically, this statement of evidence relates to the matters in the Section 42A Report Schedules and Threatened Species Objectives and addresses in particular submissions seeking changes to the matters listed within Schedule A2 (Lakes with outstanding indigenous ecosystem values), Schedule F1 (Rivers and lakes with significant indigenous ecosystems) and Schedule F2c (Significant habitats for indigenous birds in the coastal marine area.

## **QUALIFICATIONS AND EXPERIENCE**

- I hold a PhD in Agricultural Science (La Trobe University, in Melbourne), a Post-graduate
  Diploma in Environmental Studies (Victoria University) and a Bachelor's Degree in
  Agricultural Science (First Class Honours) from Canterbury University.
- I have 25 years of experience in ecological restoration and monitoring through roles I have held at Greater Wellington Regional Council (Greater Wellington) and the Department of Conservation. My expertise covers the conservation management of indigenous ecosystems (forests, wetlands and coastal dunes), as well as species, including birds, lizards and plants.
- I have previously been a Team Leader in Greater Wellington's Environmental Science

  Department, overseeing scientific investigations, monitoring and research associated with terrestrial ecology in the Wellington region. In this role I have provided scientific advice for policy development and published multiple reports relating to the state of biodiversity in the region. In recent times, I have worked with the Department of Conservation and regional council scientists to develop a methodology for determining the regional conservation status of species.
- I provided expert evidence to the Proposed Natural Resources Plan Hearings Panel in relation to wetlands and have been involved in the implementation of the National Policy Statement for Freshwater Management 2020 (NPS-FM) for the Council, including preparing

a list of nationally threatened freshwater species and collating information on their critical habitat needs.

#### **CODE OF CONDUCT**

I have read the Code of Conduct for Expert Witnesses set out in the Environment Court's Practice Note 2023 (Part 9). I have complied with the Code of Conduct in preparing this evidence. My experience and qualifications are set out above. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

#### **SCOPE OF EVIDENCE**

- 9 My evidence responds to four submissions on PC1 with regard to Schedules A2: Lakes with outstanding indigenous ecosystem values, F1: Rivers and lakes with significant indigenous ecosystems, and F2c: Significant habitats for indigenous birds in the coastal marine area:
  - (a) Submissions made by the Environmental Defence Society (S222.116) and Forest & Bird (S261.209) that request the addition of 'indigenous fish diversity' as a value within the values list for Lake Wairarapa (Wairarapa Moana) in Schedule A2, and that the threatened fish species known to be present in Lake Wairarapa are noted within the Plan.
  - (b) Submission S113.04 from Zealandia that requests that kākahi/freshwater mussel (*Echyridella menziesii*) (At Risk declining) and *E. aucklandica* (Threatened- Nationally Vulnerable) are species added to the new Nationally threatened freshwater species column in Schedule F1 for Kaiwharawhara Stream.
  - (c) Submission S101.070 from Wellington International Airport Ltd that requests amendments to Schedule F2c for the Habitat extent known as "Wellington Harbour (Port Nicholson) foreshore; Palmer Head to Lyall Bay in relation to excluding the seawall at the western end of the Wellington International Airport" and the deletion of changes proposed through PC1 to the identified species list for that habitat. The submission also questions the robustness of the evidence for the mapped areas and reasoning for the size of the sites used for Schedule F2c in relation to Wellington Harbour mapped areas.

#### **BACKGROUND CONTEXT**

- 10 PC1 proposes changes to the Natural Resources Plan (NRP) to implement the NPS-FM in two of the five whaitua in the Wellington Region Te Awarua-o-Porirua and Te Whanganui-a-Tara, and Whaitua recommendations from the two Whaitua Committees for Te Awarua-o-Porirua and Te Whanganui-a-Tara.
- 11 The schedules included in this change include:
  - Schedule A2: Lakes with outstanding indigenous ecosystem values.
  - Schedule F1: Rivers and lakes with significant indigenous ecosystems.
  - Schedule F2a: Significant habitats for indigenous birds in rivers.
  - Schedule F2b: Significant habitats for indigenous birds in lakes.
  - Schedule F2c: Significant habitats for indigenous birds in the coastal marine area.
- Technical material used to develop the relevant schedules (Schedule A2, Schedules F1, F2, F2b and F2c) of the operative NRP is detailed in Crisp 2023 and I do not repeat that detail here.
- Provisions to give effect to the NPS-FM with respect to freshwater quality or quality have been incorporated into PC1. Under the NPS-FM 3.8(3)(c), the locations of habitats of nationally threatened species in each regional Freshwater Management Unit are required to be identified and their critical habitat attributes noted.
- As part of the PC1 process, amendments were also made to schedules related to ecosystems and habitats with significant indigenous biodiversity values to update the threatened species that have been identified as being present. This is to reflect updated knowledge following the proposed NRP process.

## **SCHEDULE A2 (LAKE WAIRARAPA)**

Response to Submissions S222.116 and S261.209 requesting the addition of 'indigenous fish diversity' and the noting of the threatened fish species known to be present in Lake Wairarapa (Wairarapa Moana)

- As set out above, this submission has sought to include a new value within the values column for Lake Wairarapa (Wairarapa Moana) within Schedule A2. For the reasons that follow, I agree that it would be appropriate from a technical perspective to add "Indigenous fish diversity" as an identified indigenous ecosystem value for Lake Wairarapa (Wairarapa Moana) in Schedule A2. It is a value classification that is included for the other listed lakes within the Schedule. Details about the threatened fish species present in Lake Wairarapa are already contained in Schedule F1 for Lake Wairarapa. It has been noted in Crisp 2023 that *Echyridella aucklandica* (Threatened -Nationally Vulnerable) should be listed in the Nationally Threatened Freshwater Species and their critical habitat attributes column for Lake Wairarapa (see Attachment 1).
- 16 Critical habitat attributes *for E.aucklandica* are "Good water qualityand substrate that is not too silty, as can clog the gills. Presence of native host fish species required for the larval stage and key to recruitment".

## SCHEDULE F1 (KAIWHARAWHARA STREAM)

Response to Submission S113.04 requesting that kākahi/freshwater mussel (*Echyridella menziesii*)

(At Risk declining) and *E. aucklandica* (Threatened- Nationally Vulnerable) be added to the Nationally Threatened Freshwater Species and their critical habitat attributes column for Kaiwharawhara Stream.

- I agree with the submitter that *E. aucklandica* (Threatened-Nationally Vulnerable) should be added to the Nationally Threatened Freshwater Species and their critical habitat attributes column for Kaiwharawhara Stream. *E. aucklandica* (Threatened-Nationally Vulnerable) is threatened species consistent with the NPSFM. I note that the species was not included in the proposed change as it involved a translocation into the stream that was not considered.
- I do not agree with the submitter that *E. menziesii* should be added to the same column. *E. menziesii* is categorised as Nationally At Risk Declining and not nationally Threatened.

  As only Nationally Threatened species are being considered in this column, it is not appropriate to add *E. menziesii*.

## SCHEDULE F2C (WELLINGTON AIRPORT)

Response to Submission S101.070 that questions the rationale for including Wellington Harbour 
(Port Nicholson) foreshore; Palmer Head to Lyall Bay as a significant bird site in Schedule

F2c, the accuracy of the information and to consider changes to the 'site' definition.

- This submitter is seeking the deletion of this identified habitat extent from Schedule F2c, requesting that evidence should also be provided that the mapped areas are sufficiently accurate for inclusion in the Proposed NRP. Repeated surveys have shown that six Nationally Threatened or At Risk bird species use the habitat at this site: banded dotterel, little penguin, pied shag, red-billed gull, variable oystercatcher and white-fronted tern. The presence of this range of species has resulted in this area being listed as being significant for coastal birds and also some updates to the listing proposed through PC1. I support the retention of the listing within Schedule F2c and of the changes to it proposed by PC1.
- The surveys referred to above included ones by the Ornithological Society, who completed monthly counts of bird species in Wellington Harbour in sections for 2 years in each of 1975-1977, 1986-1988, 1998-200 and 2008-2010. Coastal bird surveys of the area were also completed in 2018 and 2023 by the Council, as part of 5 yearly region-wide surveys. Additionally, annual surveys of the Wellington City coastline were undertaken between 2018 and 2022 on behalf of Wellington City Council (McArthur 2024<sup>11</sup>).
- 21 The McArthur 2024 report details that surveys were carried out between November and January each year, at a time of year when most coastal-breeding shorebirds were breeding and were more sedentary, occupying established breeding territories and 'anchored' to active nests or broods of chicks. Carrying out these surveys at a time of year during which these species are relatively sedentary minimises the risk of double-counting birds that would be more likely to disperse over larger distances along the coastline in other seasons.
- It is noted in the McArthur 2024 report that the foreshore at the southern end of the Wellington International Airport runway and a small area of *Sarcocornia* herbfield and bare gravels adjacent to the runway itself supports a small breeding population of pohowera / banded dotterels and is the only location on the Wellington City coastline east of Sinclair Head where these birds currently breed.

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<sup>&</sup>lt;sup>1</sup> McArthur, N. 2024. State and trends in the indigenous bird values of the Wellington region coastline. Client report prepared for Greater Wellington Regional Council, Wellington.

- 23 I support the approach taken across these surveys and consider they provide accurate information for the identification of the area as a significant habitat for indigenous birds in the coastal marine area.
- 24 The submitter also states that the References to "the site" within the schedule description should be replaced with "Overall the Harbour provides" or "Part of the Harbour provides" to reflect the size of the area. It is not clear what the submitter means with respect to replacing "the site" with "Overall the Harbour provides" or "Part of the Harbour provides" to reflect the size of the area. The determination of significant sites for coastal birds within the Wellington harbour was based on the geographical segments used for the Ornithological Society surveys and those segments were considered appropriate for environmental planning. Their use enabled greater accuracy to be provided for planning purposes and meant that developments within specific areas did not need to consider impacts on the whole harbour (which would have made it more difficult in terms of gaining resource consent). I support this approach to determining the sites for significant habitats for indigenous birds in the coastal marine area.

## **CONCLUSION**

25 For the reasons set out above I consider that there is technical evidence to support changes to Schedules A2 and F1, the inclusion of "Indigenous fish diversity" as a value for Lake Wairarapa in Schedule A2 and adding Echyridella aucklandica to the Nationally Threatened Freshwater Species and their critical habitat attributes column for Lake Wairarapa and Kaiwharawhara Stream in Schedule F1.

DATE:	3 October 2024

**PHILIPPPA NOEL CRISP** 

ASSOCIATE ECOLOGIST, GREATER

WELLINGTON REGIONAL COUNCIL