BEFORE AN EXPERT PANEL **FTAA-2510-1118**
SOUTHERN SEAWALL RENEWAL PROJECT

Under the **FAST-TRACK APPROVALS ACT 2024**

In the matter of an application by Wellington International Airport Limited for approvals for the Southern Seawall Renewal Project

By **WELLINGTON INTERNATIONAL AIRPORT LIMITED**

Applicant

STATEMENT OF EVIDENCE OF JOHN COCKREM (KORORĀ LITTLE PENGUIN) ON BEHALF OF WELLINGTON INTERNATIONAL AIRPORT LIMITED

17 March 2026

BUDDLE FINDLAY

Barristers and Solicitors
Wellington

Solicitor Acting: **Dave Randal / Thad Ryan / Frances Wedde**
Email: [redacted]

Tel 64 4 498 7335 Fax 64 4 499 4141 PO Box 2694 DX SP20201 Wellington 6011

INTRODUCTION

1. My full name is **John Fenton Cockrem**.

2. My evidence is given on behalf of Wellington International Airport (**WIAL**) in respect of WIAL's proposed Southern Seawall Renewal project (**Project**) in response to comments made under section 53 of the Fast-track Approvals Act 2024 (**Act**) by:

   (a) Department of Conservation (**DOC**); and

   (b) Wellington Regional Council (**GWRC**).

3. I prepared the Kororā Ornithology – Kororā (Little Penguin) Assessment (**technical assessment**), dated 15 October 2025, in Part B of the application for the Project, as well as the Kororā Little Penguin Management Plan (**KPMP**) provided in Part G of the application. My qualifications and experience are set out in Appendix 2 of my technical assessment.

Code of conduct

4. I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. In particular, unless I state otherwise, the issues addressed in my 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 the opinions I express.

DOC SECTION 51 REPORT AND SECTION 53 COMMENTS

Kororā

DOC's assessment

5. I am grateful for DOC's supportive feedback of the Project's kororā management approach in its section 51 report and section 53 comments. I particularly appreciate the constructive and helpful discussions I have had with Mr Houston, including a recent meeting and discussion of the installation of low netting fencing to prevent kororā from crossing roads adjacent to the Project site.

6. In particular, DOC's section 51 assessment concluded that:

(a) the overall package of new habitat, nestboxes, predator exclusion fencing and supporting advocacy is sufficient to offset the interim loss of kororā habitat;

(b) the proposed timing of works, penguin exclusion measures, nest buffers, rock removal protocols, kororā extraction/relocation techniques, and daily site checks are consistent with best practice;

(c) marking birds with PIT tags is supported, as this will provide valuable information on relocation success and future occupancy of new colonies; and

(d) the proposed reporting requirements are adequate.

7. While supportive overall, DOC provided specific comments for WIAL to consider:

(a) the KPMP or consent conditions should require the use of current best practice protocols for PIT tagging;

(b) GPS deployment numbers should be specified, with DOC recommending up to 30 deployments annually, with each bird tagged no more than once per year; and

(c) additional temporary low fencing (40 cm) and netting along Moa Point Road (north of the southern seawall, and between the southern seawall and the Stage 1 Korora Colony, should be installed to reduce penguin mortality risk.

PIT tagging

8. Two methods for PIT tagging (microchipping) of kororā are recognised by the DOC Marking Office (formerly the DOC Banding Office). The most widely used method, used by the New Zealand Penguin Initiative (**NZPI**) and sometimes referred to as "best practice", involves holding a kororā by the neck and by the feet. The second method, which I developed, is a more gentle approach to handling, and has been used for the microchipping of more than 1500 kororā.

9. The widely used method involves holding a kororā by the neck and by the feet. Kororā do not like being held by the feet and usually struggle when held in this manner. The bird is held across the legs of the holder, at 90 degrees to the holder's legs, while the person inserting the microchip is

facing the holder and has to twist themselves to insert the microchip. The holder and the microchipper are both sitting or kneeling on the ground.

10. For my method, the holder and the microchipper both sit on chairs. A kororā is placed in a cloth bag and is held around the body to restrain the flippers. The bird, in the bag, is placed on the lap of the holder, parallel to the legs of the holder. For most kororā, once in this position, the birds are calm enough that no holding is required, with the bird just sitting quietly in the bag on the lap of the holder. The bird on the lap of the holder is automatically aligned with the direction of insertion of the microchip, making it straightforward for the microchipper to insert the microchip.

11. The gentle approach, in comparison with the most widely used method, appears to cause less stress to the birds, and is more readily accomplished by people, especially people not familiar with handling penguins.

12. Mr Charlie Rudd is mandated by Taranaki Whānui as the mana whenua lead in relation to the monitoring and handling of kororā for coastal construction projects in Te Whanganui-a-Tara. Mr Rudd has previously watched kororā being microchipped using the NZPI method, and has expressed concerns to me regarding that method.

13. On 20 December 2025, Mr Rudd and Dr Uys (from GWRC) visited my kororā study site on Mana Island with me, where I demonstrated my method of handling kororā and applying PIT tags. Based on that trip, I understand Mr Rudd is generally comfortable with microchipping using my method.

14. The PIT tagging (microchipping) of kororā for the Project will follow my protocol for microchipping.

GPS deployment

15. GPS tracking of kororā from Mana Island, and from other locations in New Zealand and Australia, has shown that birds from one location can go in quite different directions for foraging trips. For example, some kororā from Mana Island were tracked swimming north to waters off the Manawatu coastline, while others went out into Cook Strait or along the coastline to the south of Mana Island.

16. It would be very valuable to know whether or not individual kororā consistently forage in similar locations, and to be able to relate foraging

behaviour of individual penguins to their breeding success. Foraging behaviour varies across the year, so information about the consistency of foraging locations of individual penguins could be obtained by tracking them twice during the same stage of the annual cycle, for example, twice during the winter.

17. In his tracking studies, Dr Cockrem has not found any evidence of adverse effects of GPS tagging on breeding success in kororā. Tracking some kororā twice in one year would contribute to kororā conservation by increasing our understanding of individual characteristics of the birds, while continuing a prudent approach to limiting any potential for GPS devices to affect penguins. With this background, it is envisaged that some individual penguins might be tracked (GPS tagged) twice in one year.

18. The KPMP will be revised to state that individual birds will be tagged no more than twice per year. A note will also be added to the KPMP to state that it is envisaged that there will be up to 30 deployments annually, with discussions with DOC to be held if it was apparent that more than 30 deployments within one year would be appropriate.

Temporary low fencing

19. I have discussed DOC's recommendation to install temporary low fencing to minimise penguin mortality that may result from increased interactions between displaced penguins, vehicles and dogs in areas adjacent to construction works areas with the WIAL team. WIAL has agreed this recommendation will be implemented, subject to landowner approval by Wellington City Council (**WCC**). Low temporary fencing will be installed along the landward edge of the rock revetment beside Moa Point Road, extending at least 300 m north from the Lyall Bay breakwater (adjacent to the western seawall). Netting will be attached to the existing low wooden fence beside Moa Point Road, from the eastern end of the Moa Point Yard (approximately opposite Stewart Duff Drive) extending along the road to opposite the eastern end of the houses (a distance of at least 300 m). This is also subject to approval by WCC as landowner.

GWRC SECTION 53 COMMENTS

20. As noted above, Dr Uys and Mr Rudd visited my kororā study site on Mana Island on 20 December 2025. This was a valuable opportunity for Dr Uys and Mr Rudd to see the features of nestbox placement that make the

nestboxes attractive to kororā. We also had very helpful and collegial discussions about the WIAL seawall renewal project. I thank Dr Uys for taking the time to come to Mana Island. Dr Uys and I are both ornithologists and we share the same goal of doing the best for kororā in the Wellington region.

Ensuring the effectiveness of proposed offsetting for kororā habitat loss

Issue

21. In its section 53 comments, GWRC express concern that construction of the new seawall will result in the loss of up to 50 kororā roost and nest sites.

22. GWRC agrees with WIAL that the residual adverse effects from the loss of kororā habitat will be more than minor, and acknowledges WIAL's proposal to offset those effects by establishing the proposed kororā colonies.

23. However, GWRC considers that the conditions proposed by WIAL do not provide reasonable certainty that the long-term outcomes intended to be achieved by the proposed offsetting will be achieved.

24. GWRC considers that the proposed consent conditions should be amended to provide for targets, monitoring, and the potential for adaptive management, including:

    (a) a new condition setting the kororā habitat uptake target equal to the habitat lost;

    (b) a new condition requiring monitoring of interim five-yearly targets (on a pro-rata basis) over the 20-year monitoring period proposed by WIAL;

    (c) a new condition requiring the consent holder, if interim targets are not met, to investigate the reasons and set out actions to achieve the next target; and

    (d) a condition that provides for monitoring to cease once the target for offsetting has been met.

Response

25. I do not consider that the conditions recommended by GWRC are necessary or appropriate.

The Project provides significant, long-term benefits to kororā

26. As described in my technical assessment, the WIAL approach to providing for kororā as part of a coastal construction project will lead to significant, long-term benefits for kororā, and in my opinion provides a model for other construction projects to follow in future.

27. Two new kororā colonies will be created and maintained, to achieve our two overarching goals for the kororā colonies:

    (a) to contribute to the long term conservation of kororā in the Wellington region by providing breeding sites for kororā that are safe from predators, attacks by dogs, disturbance by humans, and loss of nest sites due to sea level rise; and

    (b) to have at least as many breeding pairs in the new kororā colonies as are likely to currently be present in the southern seawall.

28. Features of the colonies include:

    (a) an area of 2930 m^2 that will be set aside for kororā within the two colonies;

    (b) the provision of at least 170 (and up to 270) nestboxes;

    (c) fencing and predator control to protect korora using the colonies; and

    (d) other measures to ensure the habitat is of high quality, including enhancement planting, lighting and placement of rocks, and the underpass to the Stage 1 Kororā Colony.

29. Overall, the two kororā colonies will be significantly larger in area than the current southern seawall habitat. The habitat that will be provided will also be of significantly greater quality, protected by fencing and pest control, and subject to enhancement planting and other measures to support kororā use.

30. Nestboxes in the two new kororā colonies will provide nest sites of much higher quality than existing nest sites in the Southern Seawall. Experience with the creation of other successful new kororā colonies will be used to provide for optimal placement of nestboxes to encourage uptake, with rocks and gravel and wood at each box and planting around each box to create cover on a box-by-box basis. The sites will be safe from sea level rise, and

from storms. This is in contrast to the vulnerability of many kororā nest sites around the coastline of Wellington city and Wellington harbour.

31. In the coming decades, the importance of the two new kororā colonies will grow as increasing numbers of natural kororā sites are lost due to sea level rise. In my opinion, the colonies are likely to become the most significant kororā breeding sites along the Wellington city coastline over the next 50 years.

32. My design of the kororā colonies is based on my experience conducting field studies of kororā (noting I am the only penguin biologist in New Zealand who also has experience in writing and implementing penguin management plans). I have more than 35 years of experience with penguins, including 15 years of experience working with kororā.[1]

33. I have an ongoing kororā study on Mana Island, off the Porirua coast, with kororā using all of the 100 boxes that I placed on the island. More than 90% of these nestboxes are used for breeding which, to my knowledge, is the highest rate of uptake of kororā nestboxes for breeding for any kororā nestbox colony.

34. I designed and built a kororā nestbox colony at Napier Port (55 nestboxes) and have designed colonies and contributed to the placement of kororā nestboxes at Port Tarakohe in Golden Bay (150 nestboxes), Kaiteriteri near Nelson (50 nestboxes), Waiheke Island (12 nestboxes) and Kaikoura (25 nestboxes).

35. My understanding is that the Project will provide the most significant contribution to kororā conservation of any New Zealand coastal construction project.

There is no evidential basis for the target of 50 breeding pairs by 20 years, or for the interim targets

36. In the Kororā Assessment, I recorded that 39 total penguin sites were identified in the southern seawall, and conservatively estimated up to 50 penguin sites in the Project area. Penguin sites are locations where a penguin dog indicated that it could detect the smell of penguins, or locations where visual observations found either one or two penguins, or sign of

[1] See Appendix 2 in my technical assessment.

penguins. The number of penguin sites found in an area is not the same as the number of breeding pairs in that area.

37. Kororā on land during the day can be members of an established breeding pair at their breeding site, single birds that have not previously bred and that are on land briefly, or single or paired birds that are exploring for a breeding site and were present at a site temporarily. The number of breeding birds in a population of kororā is approximately two-thirds of the total number of birds at that colony. The finding of 39 penguin sites in the southern seawall indicates that there are likely to be at least 25 breeding pairs in the southern seawall, but does not support a conclusion that there are as many as 50 breeding pairs present.

38. I expect that there will be at least 20 to 30 breeding attempts each breeding season (20 to 30 nestboxes in which eggs are laid by 20 to 30 breeding pairs) in the stage one and stage two colonies combined by 20 years after the completion of the Stage 2 Kororā Colony. It is further anticipated that after 30 years there will be at least 30 breeding attempts. My expectation is that after 20 years the number of breeding attempts each season will be similar to or greater than the number of breeding attempts (25) likely to be occurring currently in the seawall.

39. Despite my estimates, WIAL cannot force penguins to take up residence in nestboxes, has no control over the number of penguins that will be present on the adjacent coastline each year and hence potentially available to take up residence in the nestboxes, and cannot guarantee breeding success each year or the survival rate of penguins from year-to-year.

40. In addition, the two new kororā colonies are located in harsh coastal environments for the establishment of plants. I anticipate that it will take at least 10 years from the start of planting at the colonies until there is good vegetation cover available for penguins. The rate of vegetation growth each year, and the extent to which vegetation might suffer from storms, are additional factors that are beyond WIAL's control. WIAL propose to maintain indigenous plantings at each of the kororā colonies for 20 years and will work with WCC nurseries to harden appropriate plant species in the interests of undertaking reasonable steps to ensure the success of the plantings.

41. The establishment of these new colonies, and the uptake of these colonies by kororā, is a long-term undertaking. The numbers of kororā that use

nestboxes, and numbers that breed, will depend on many factors that WIAL cannot influence. These include growth rates of vegetation at the colonies, local sea and weather conditions each year, survival of penguins from year to year, and changes in availability of natural sites along adjacent coastline (and hence changes in numbers of penguins that may be prospecting for new nest sites).

42. While it is my expectation that in the new colonies we will reach and exceed the number of breeding pairs estimated to be in the southern seawall, it is impossible to specify how long this will take.

Monitoring of progress and adaptive management are integral to WIAL's approach to managing effects on kororā

43. WIAL will regularly review the monitoring of nestboxes, and results from its regular inspections of the new colonies, so that we can consider progress and what actions could be taken to increase the rate of uptake of nestboxes. For example, if penguins are taking up nestboxes in one area of a colony and not other areas, we can look at the characteristics of the area in which the penguins are taking up nestboxes and replicate those characteristics in other areas. Monitoring of progress, and adaptive management, will be implemented so that we can achieve the goals referred to above

44. WIAL and I have a collaborative approach to achieving our goals for kororā in the Project. Meetings, including site visits, have been helpful as we have developed our kororā plans.

45. In order to continue the collaborative approach, WIAL has accepted my recommendation that we arrange meetings with GWRC and DOC, to discuss kororā progress on the seawall project, at two-yearly intervals for 10 years after the completion of the stage one colony, then at five-yearly intervals for another 10 years.

Comment on GWRC recommended conditions

46. GWRC has proposed conditions ECO 41, 69, 70 and 71. These conditions cannot be met and should not be included in the final conditions for the Project for the following reasons.

47. In my view, the proposed conditions:

(a) contain terms that are not biologically meaningful (discussed further below);

(b) omit consideration of the Stage 2 Kororā Colony;

(c) have taken an arbitrary and unreasonable target number of 50 breeding pairs (as per my comments above);

(d) ignore the impossibility of being able to force penguins to use nest boxes;

(e) have incorrectly assumed that the rate of uptake of nestboxes by kororā will be a straight line from the time when the nestboxes are available to kororā;

(f) do not take into account that the number of kororā that could potentially take up residence in nestboxes is affected by weather conditions and could decline temporarily over several years (for example, at the large Oamaru Blue Penguin Colony in the South Island, the number of breeding pairs decreased by about one quarter in a breeding season that followed prolonged winter storms, then gradually increased over following years);

(g) assume incorrectly that if an arbitrary "target" has not "been met" that there is a Project-related reason for this; and

(h) assume that "remedial actions" could be taken so that a "target" could "be met", when this is not necessarily the case because, as set out above, we cannot control penguin behaviour beyond providing suitable habitat.

48. GWRC's proposed Condition ECO.41 includes the phrase "effective kororā habitat is taken up". While it can be presumed that this refers to the use of nestboxes by kororā, the phrase is not biologically meaningful. The term "unique breeding pairs" is also not biologically meaningful. Kororā form breeding pairs that can be temporary, with a new male taking over a pair or a female moving to be with a different male within a breeding season, and the members of a pair can change from one breeding season to the next.

Dr John Fenton Cockrem

17 March 2026